

# All4, Inc.

2393 Kimberton Road  
Kimberton, PA 19442

## Coke Oven ICR Sampling Event #06

US Steel Corp - Clairton Works ICR

Project: 00701-0002.00

## Analytical Report (2023EE101)

### *EPA Method 325B*

1,3-Butadiene

Benzene

Ethylbenzene

m/p-Xylene

o-Xylene

Toluene



### Enthalpy Analytical, LLC

Phone: (919) 850 - 4392 / Fax: (919) 850 - 9012 / [www.enthalpy.com](http://www.enthalpy.com)

800-1 Capitola Drive, Durham, NC 27713

I certify that to the best of my knowledge all analytical data presented in this report:

- Have been checked for completeness
- Are accurate, error-free, and legible
- Have been conducted in accordance with approved protocol, and that all deviations and analytical problems are summarized in the appropriate narrative(s)

This analytical report was prepared in Portable Document Format (.PDF). This report shall not be reproduced except in full without approval of the laboratory. This will provide assurance that parts of a report are not taken out of context.

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke, positioned above the report date.

Report Issued: 01/18/2023



# Summary of Results

# Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

## Summary

Sample Code	Tube ID	1,3-Butadiene (ug/m <sup>3</sup> )	Flag	Benzene (ug/m <sup>3</sup> )	Flag	Ethylbenzene (ug/m <sup>3</sup> )	Flag	m-/p-Xylenes (ug/m <sup>3</sup> )	Flag	o-Xylene (ug/m <sup>3</sup> )	Flag	Toluene (ug/m <sup>3</sup> )	Flag
USSCL-PT01-S-20221219	B10423		ND	21.9			ND	0.695			ND	3.93	
USSCL-PT02-S-20221219	B12142		ND	6.93			ND	0.777			ND	12.8	
USSCL-PT03-S-20221219	B17169		ND	12.0			ND	0.868			ND	20.7	
USSCL-PT04-S-20221219	B44250		ND	11.1			ND	1.20			ND	12.0	
USSCL-PT05-S-20221219	B52726		ND	4.19			ND	0.832			ND	18.6	
USSCL-PT06-S-20221219	C20600		ND	6.34			ND	0.908			ND	9.19	
USSCL-PT07-S-20221219	B20632		ND	1.88			ND	0.605			ND	6.34	
USSCL-PT08-S-20221219	B43632		ND	1.88			ND	0.581			ND	7.79	
USSCL-PT09-S-20221219	B18572		ND	10.6			ND	1.60		0.627		23.0	
USSCL-PT10-D-20221219	C01384		ND	21.6			ND	1.44			ND	10.4	
USSCL-PT10-S-20221219	B27351		ND,Rc	20.9	Rc		ND,Rc	1.61	Rc	0.661	Rc	11.6	Rc
USSCL-PT10-B-20221219	B43014		ND		ND		ND		ND		ND		ND
USSCL-PT11-S-20221219	B40408		ND,Rc	35.8	Rc		ND,Rc	1.60	Rc	0.633	Rc	10.8	Rc
USSCL-PT12-S-20221219	B50632		ND,Rc	6.67	Rc	0.578	Rc	0.942	Rc		ND,Rc	4.38	Rc

ND: The analyte was not present above the Method Detection Limit

Rc: Recollection analysis



# Results

# Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

## 1,3-Butadiene

Sample Code	Tube ID	Conc (ug/m <sup>3</sup> )	Conc (ppbv)	Calc Amt (ng)	Temp (°F)	Uptake Rate (mL/min)	Sample Time (min)	LOD (ug/m <sup>3</sup> )	LOQ (ug/m <sup>3</sup> )	LOD (ppbv)	LOQ (ppbv)	Flags
USSCL-PT01-S-20221219	B10423				32.9	0.431	21,624	0.572	0.572	0.259	0.259	ND
USSCL-PT02-S-20221219	B12142				32.9	0.431	21,627	0.571	0.571	0.258	0.258	ND
USSCL-PT03-S-20221219	B17169				32.9	0.431	21,629	0.571	0.571	0.258	0.258	ND
USSCL-PT04-S-20221219	B44250				32.9	0.431	21,632	0.571	0.571	0.258	0.258	ND
USSCL-PT05-S-20221219	B52726				32.9	0.431	21,633	0.571	0.571	0.258	0.258	ND
USSCL-PT06-S-20221219	C20600				32.9	0.431	21,629	0.571	0.571	0.258	0.258	ND
USSCL-PT07-S-20221219	B20632				32.9	0.431	21,641	0.571	0.571	0.258	0.258	ND
USSCL-PT08-S-20221219	B43632				32.9	0.431	21,639	0.571	0.571	0.258	0.258	ND
USSCL-PT09-S-20221219	B18572				32.9	0.431	21,644	0.571	0.571	0.258	0.258	ND
USSCL-PT10-D-20221219	C01384				32.9	0.431	21,642	0.571	0.571	0.258	0.258	ND
USSCL-PT10-S-20221219	B27351				32.9	0.431	21,642	0.571	0.571	0.258	0.258	ND,Rc
USSCL-PT10-B-20221219	B43014				32.9	0.431	21,641	0.571	0.571	0.258	0.258	ND
USSCL-PT11-S-20221219	B40408				32.9	0.431	21,653	0.571	0.571	0.258	0.258	ND,Rc
USSCL-PT12-S-20221219	B50632				32.9	0.431	21,655	0.571	0.571	0.258	0.258	ND,Rc

## Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

### Benzene

Sample Code	Tube ID	Conc (ug/m <sup>3</sup> )	Conc (ppbv)	Calc Amt (ng)	Temp (°F)	Uptake Rate (mL/min)	Sample Time (min)	LOD (ug/m <sup>3</sup> )	LOQ (ug/m <sup>3</sup> )	LOD (ppbv)	LOQ (ppbv)	Flags
USSCL-PT01-S-20221219	B10423	21.9	6.87	304	32.9	0.642	21,624	0.180	0.384	0.0564	0.120	
USSCL-PT02-S-20221219	B12142	6.93	2.17	96.2	32.9	0.642	21,627	0.180	0.384	0.0564	0.120	
USSCL-PT03-S-20221219	B17169	12.0	3.76	167	32.9	0.642	21,629	0.180	0.384	0.0564	0.120	
USSCL-PT04-S-20221219	B44250	11.1	3.48	154	32.9	0.642	21,632	0.180	0.384	0.0564	0.120	
USSCL-PT05-S-20221219	B52726	4.19	1.31	58.2	32.9	0.642	21,633	0.180	0.384	0.0564	0.120	
USSCL-PT06-S-20221219	C20600	6.34	1.99	88.1	32.9	0.642	21,629	0.180	0.384	0.0564	0.120	
USSCL-PT07-S-20221219	B20632	1.88	0.588	26.1	32.9	0.642	21,641	0.180	0.384	0.0564	0.120	
USSCL-PT08-S-20221219	B43632	1.88	0.589	26.1	32.9	0.642	21,639	0.180	0.384	0.0564	0.120	
USSCL-PT09-S-20221219	B18572	10.6	3.33	148	32.9	0.642	21,644	0.180	0.384	0.0564	0.120	
USSCL-PT10-D-20221219	C01384	21.6	6.76	300	32.9	0.642	21,642	0.180	0.384	0.0564	0.120	
USSCL-PT10-S-20221219	B27351	20.9	6.55	290	32.9	0.642	21,642	0.180	0.384	0.0564	0.120	Rc
USSCL-PT10-B-20221219	B43014				32.9	0.642	21,641	0.180	0.384	0.0564	0.120	ND
USSCL-PT11-S-20221219	B40408	35.8	11.2	497	32.9	0.642	21,653	0.180	0.384	0.0563	0.120	Rc
USSCL-PT12-S-20221219	B50632	6.67	2.09	92.8	32.9	0.642	21,655	0.180	0.384	0.0563	0.120	Rc

## Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

### Ethylbenzene

Sample Code	Tube ID	Conc (ug/m³)	Conc (ppbv)	Calc Amt (ng)	Temp (°F)	Uptake Rate (mL/min)	Sample Time (min)	LOD (ug/m³)	LOQ (ug/m³)	LOD (ppbv)	LOQ (ppbv)	Flags
USSCL-PT01-S-20221219	B10423				32.9	0.441	21,624	0.576	0.576	0.133	0.133	ND
USSCL-PT02-S-20221219	B12142				32.9	0.441	21,627	0.576	0.576	0.133	0.133	ND
USSCL-PT03-S-20221219	B17169				32.9	0.441	21,629	0.576	0.576	0.133	0.133	ND
USSCL-PT04-S-20221219	B44250				32.9	0.441	21,632	0.575	0.575	0.133	0.133	ND
USSCL-PT05-S-20221219	B52726				32.9	0.441	21,633	0.575	0.575	0.133	0.133	ND
USSCL-PT06-S-20221219	C20600				32.9	0.441	21,629	0.576	0.576	0.133	0.133	ND
USSCL-PT07-S-20221219	B20632				32.9	0.441	21,641	0.575	0.575	0.133	0.133	ND
USSCL-PT08-S-20221219	B43632				32.9	0.441	21,639	0.575	0.575	0.133	0.133	ND
USSCL-PT09-S-20221219	B18572				32.9	0.441	21,644	0.575	0.575	0.133	0.133	ND
USSCL-PT10-D-20221219	C01384				32.9	0.441	21,642	0.575	0.575	0.133	0.133	ND
USSCL-PT10-S-20221219	B27351				32.9	0.441	21,642	0.575	0.575	0.133	0.133	ND,Rc
USSCL-PT10-B-20221219	B43014				32.9	0.441	21,641	0.575	0.575	0.133	0.133	ND
USSCL-PT11-S-20221219	B40408				32.9	0.441	21,653	0.575	0.575	0.132	0.132	ND,Rc
USSCL-PT12-S-20221219	B50632	0.578	0.133	5.52	32.9	0.441	21,655	0.575	0.575	0.132	0.132	Rc

## Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

### m-/p-Xylenes

Sample Code	Tube ID	Conc (ug/m <sup>3</sup> )	Conc (ppbv)	Calc Amt (ng)	Temp (°F)	Uptake Rate (mL/min)	Sample Time (min)	LOD (ug/m <sup>3</sup> )	LOQ (ug/m <sup>3</sup> )	LOD (ppbv)	LOQ (ppbv)	Flags
USSCL-PT01-S-20221219	B10423	0.695	0.160	6.62	32.9	0.441	21,624	0.579	0.579	0.133	0.133	
USSCL-PT02-S-20221219	B12142	0.777	0.179	7.40	32.9	0.441	21,627	0.579	0.579	0.133	0.133	
USSCL-PT03-S-20221219	B17169	0.868	0.200	8.28	32.9	0.441	21,629	0.579	0.579	0.133	0.133	
USSCL-PT04-S-20221219	B44250	1.20	0.276	11.4	32.9	0.441	21,632	0.579	0.579	0.133	0.133	
USSCL-PT05-S-20221219	B52726	0.832	0.192	7.93	32.9	0.441	21,633	0.579	0.579	0.133	0.133	
USSCL-PT06-S-20221219	C20600	0.908	0.209	8.66	32.9	0.441	21,629	0.579	0.579	0.133	0.133	
USSCL-PT07-S-20221219	B20632	0.605	0.139	5.77	32.9	0.441	21,641	0.579	0.579	0.133	0.133	
USSCL-PT08-S-20221219	B43632	0.581	0.134	5.54	32.9	0.441	21,639	0.579	0.579	0.133	0.133	
USSCL-PT09-S-20221219	B18572	1.60	0.369	15.3	32.9	0.441	21,644	0.579	0.579	0.133	0.133	
USSCL-PT10-D-20221219	C01384	1.44	0.331	13.7	32.9	0.441	21,642	0.579	0.579	0.133	0.133	
USSCL-PT10-S-20221219	B27351	1.61	0.371	15.3	32.9	0.441	21,642	0.579	0.579	0.133	0.133	Rc
USSCL-PT10-B-20221219	B43014				32.9	0.441	21,641	0.579	0.579	0.133	0.133	ND
USSCL-PT11-S-20221219	B40408	1.60	0.369	15.3	32.9	0.441	21,653	0.579	0.579	0.133	0.133	Rc
USSCL-PT12-S-20221219	B50632	0.942	0.217	8.99	32.9	0.441	21,655	0.578	0.578	0.133	0.133	Rc

## Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

### o-Xylene

Sample Code	Tube ID	Conc (ug/m <sup>3</sup> )	Conc (ppbv)	Calc Amt (ng)	Temp (°F)	Uptake Rate (mL/min)	Sample Time (min)	LOD (ug/m <sup>3</sup> )	LOQ (ug/m <sup>3</sup> )	LOD (ppbv)	LOQ (ppbv)	Flags
USSCL-PT01-S-20221219	B10423				32.9	0.441	21,624	0.583	0.583	0.134	0.134	ND
USSCL-PT02-S-20221219	B12142				32.9	0.441	21,627	0.583	0.583	0.134	0.134	ND
USSCL-PT03-S-20221219	B17169				32.9	0.441	21,629	0.583	0.583	0.134	0.134	ND
USSCL-PT04-S-20221219	B44250				32.9	0.441	21,632	0.582	0.582	0.134	0.134	ND
USSCL-PT05-S-20221219	B52726				32.9	0.441	21,633	0.582	0.582	0.134	0.134	ND
USSCL-PT06-S-20221219	C20600				32.9	0.441	21,629	0.583	0.583	0.134	0.134	ND
USSCL-PT07-S-20221219	B20632				32.9	0.441	21,641	0.582	0.582	0.134	0.134	ND
USSCL-PT08-S-20221219	B43632				32.9	0.441	21,639	0.582	0.582	0.134	0.134	ND
USSCL-PT09-S-20221219	B18572	0.627	0.144	5.98	32.9	0.441	21,644	0.582	0.582	0.134	0.134	
USSCL-PT10-D-20221219	C01384				32.9	0.441	21,642	0.582	0.582	0.134	0.134	ND
USSCL-PT10-S-20221219	B27351	0.661	0.152	6.31	32.9	0.441	21,642	0.582	0.582	0.134	0.134	Rc
USSCL-PT10-B-20221219	B43014				32.9	0.441	21,641	0.582	0.582	0.134	0.134	ND
USSCL-PT11-S-20221219	B40408	0.633	0.146	6.04	32.9	0.441	21,653	0.582	0.582	0.134	0.134	Rc
USSCL-PT12-S-20221219	B50632				32.9	0.441	21,655	0.582	0.582	0.134	0.134	ND,Rc

## Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

### Toluene

Sample Code	Tube ID	Conc (ug/m <sup>3</sup> )	Conc (ppbv)	Calc Amt (ng)	Temp (°F)	Uptake Rate (mL/min)	Sample Time (min)	LOD (ug/m <sup>3</sup> )	LOQ (ug/m <sup>3</sup> )	LOD (ppbv)	LOQ (ppbv)	Flags
USSCL-PT01-S-20221219	B10423	3.93	1.04	42.3	32.9	0.498	21,624	0.232	0.514	0.0616	0.137	
USSCL-PT02-S-20221219	B12142	12.8	3.41	138	32.9	0.498	21,627	0.232	0.514	0.0616	0.137	
USSCL-PT03-S-20221219	B17169	20.7	5.51	224	32.9	0.498	21,629	0.232	0.514	0.0616	0.137	
USSCL-PT04-S-20221219	B44250	12.0	3.19	129	32.9	0.498	21,632	0.232	0.514	0.0616	0.137	
USSCL-PT05-S-20221219	B52726	18.6	4.95	201	32.9	0.498	21,633	0.232	0.514	0.0616	0.137	
USSCL-PT06-S-20221219	C20600	9.19	2.44	99.1	32.9	0.498	21,629	0.232	0.514	0.0616	0.137	
USSCL-PT07-S-20221219	B20632	6.34	1.68	68.4	32.9	0.498	21,641	0.232	0.514	0.0616	0.136	
USSCL-PT08-S-20221219	B43632	7.79	2.07	84.0	32.9	0.498	21,639	0.232	0.514	0.0616	0.137	
USSCL-PT09-S-20221219	B18572	23.0	6.11	248	32.9	0.498	21,644	0.232	0.514	0.0616	0.136	
USSCL-PT10-D-20221219	C01384	10.4	2.76	112	32.9	0.498	21,642	0.232	0.514	0.0616	0.136	
USSCL-PT10-S-20221219	B27351	11.6	3.09	125	32.9	0.498	21,642	0.232	0.514	0.0616	0.136	Rc
USSCL-PT10-B-20221219	B43014				32.9	0.498	21,641	0.232	0.514	0.0616	0.136	ND
USSCL-PT11-S-20221219	B40408	10.8	2.88	117	32.9	0.498	21,653	0.232	0.514	0.0615	0.136	Rc
USSCL-PT12-S-20221219	B50632	4.38	1.16	47.3	32.9	0.498	21,655	0.232	0.514	0.0615	0.136	Rc

ND: The analyte was not present above the Method Detection Limit

Rc: Recollection analysis

QC



# Enthalpy Analytical

Company: All4, Inc.  
Job No.: 2023EE101-1 EPA Method 325B Analysis  
Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

## QC Samples

Field Sample Type	Sample Code	1,3-Butadiene		Benzene		Ethylbenzene		m-/p-Xylenes		o-Xylene		Toluene	
Blanks (ug/m³)	USSCL-PT10-B-20221219	ND	Pass	ND	Pass	ND	Pass	ND	Pass	ND	Pass	ND	Pass
Duplicates (difference)	USSCL-PT10-D-20221219		Pass	3.2%	Pass		Pass	11%	Pass	13%	Pass	11%	Pass

# Narrative Summary

## Enthalpy Analytical Narrative Summary

<b>Company</b>	All4, Inc.
<b>Site</b>	US Steel Corp - Clairton Works ICR
<b>Project</b>	00701-0002.00
<b>Report #</b>	2023EE101

<b>Custody</b>	<p>Daniel Simpson of Enthalpy Analytical, LLC received the thermal desorption sample tubes on 01/04/2023. The tubes were received in good condition at a temperature of 15.8 °C.</p> <p>Prior to, during, and after analysis, the samples were kept under lock with access only to authorized personnel by Enthalpy Analytical, LLC.</p>
<b>Analysis</b>	<p>The thermal desorption tube samples were analyzed for benzene, 1,3-butadiene, toluene, ethylbenzene, m/p-xylene, and o-xylene using EPA Method 325B, Volatile Organic Compounds from Fugitive and Area Sources by Thermal Desorption and GC/MS.</p> <p>The Agilent Technologies Model 8890, Gas Chromatograph "Voldemort" (S/N US2215A022) was equipped with a 5977 Mass Selective Detector (S/N US2210M022) for these analyses.</p> <p>The Perkin-Elmer ATD-650 Thermal Desorber introduced the samples and standards to the analyzer.</p>
<b>Chromatographic Conditions</b>	A copy of the acquisition method (M325B-TD-CRYO9.M) is not included in this report but may be available upon request.
<b>Calibration</b>	<p>The daily BFB check and the BFB tune associated with the initial calibration failed to meet method criteria for ion 174. However, because the 174 ion is not near the tuning region of the quant ion for the analytes in this report and the continuing calibration checks met the 30% difference criteria, the lab believes that the analyses were unaffected by the deviation. All other BFB criteria have been met for this analysis.</p> <p>The initial calibration (V010423A) met 30% RSD criteria. The initial calibration verification met 30% recovery criteria. The continuing calibration verifications met 30% difference criteria. The initial and continuing calibration raw data are not included in this report but are available upon request.</p>
<b>QC Notes</b>	<p>All internal standard response and retention time criteria were met for these analyses.</p> <p>The field blank and the lab (method) blank met the requirements of the method.</p> <p>The duplicate sample met the 30% difference criterion specified by the method.</p>



## Enthalpy Analytical Narrative Summary (continued)

### Reporting Notes

A portion of each sample (or calibration standard) was recollected onto the original sample tube after internal standard was added in the initial analysis to allow for reanalysis if necessary. An "Rc" flag indicates that a reanalysis has been performed and the resulting data have been included in the report.

As specified in EPA Method 325B, the response factor of the daily continuing calibration standard was used to quantitate all field samples and blanks.

All samples were reported as amount in ng catch, and concentration in  $\mu\text{g}/\text{m}^3$  and ppbv.

The results presented in this report are representative of the samples as provided to the laboratory.

These analyses met the requirements of the TNI Standard. Any deviations from the requirements of the reference method or TNI Standard have been stated above.

# Sample Custody



EPA Method 325 A/B  
Field Test Data Sheet and  
Chain of Custody Record

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- ☒ Standard Turn Around Time (7 business days)  
☐ Rush Turn Around Time  
• All TATs Subject to Approval by Enthalpy Analytical, LLC  
• Unless otherwise specified, sample tubes will be conditioned for re-use 3 business days after submission of results

Site Name: US Steel Corp - Clairton Works	Client Name: ALL4 LLC	Field Sampling Conditions:
Site Address: 400 State Street	Project Number: 00701 - 0002.00	<input checked="" type="checkbox"/> Rain During Deployment / Retrieval
City: Clairton	Project Manager: Dustin Snare	<input type="checkbox"/> Sample Period w/ Continuous Rain
State: PA	Email Address: dsnare@all4inc.com	<input type="checkbox"/> Sample Period w/ Snow or Melt
Zip: 15025	Telephone #: (610) 422-1126	<input type="checkbox"/> Other (Please explain in Notes)

Location	Sample ID (Tube ID)	Sample, Blank, or Duplicate	Start Date	Start Time	Stop Date	Stop Time	Sampler Initials	Avg. Ambient Temp. (°F)
PT01-221219-S	B10423	S	22/12/19	8:11 AM	23/01/03	8:35 AM	DAS	
PT02-221219-S	B12142	S	22/12/19	8:16 AM	23/01/03	8:43 AM	DAS	
PT03-221219-S	B17169	S	22/12/19	8:21 AM	23/01/03	8:50 AM	DAS	
PT04-221219-S	B44250	S	22/12/19	8:24 AM	23/01/03	8:56 AM	DAS	
PT05-221219-S	B52726	S	22/12/19	8:31 AM	23/01/03	9:04 AM	DAS	
PT06-221219-S	C20600	S	22/12/19	8:42 AM	23/01/03	9:11 AM	DAS	
PT07-221219-S	B20632	S	22/12/19	8:38 AM	23/01/03	9:19 AM	DAS	
PT08-221219-S	B43632	S	22/12/19	8:50 AM	23/01/03	9:29 AM	DAS	

Collected By: Print Name and Signature

DUSTIN SNARE

1 [Signature]

Relinquished to Shipper: Print Name and Signature	Relinquished Date	Relinquished Time
DUSTIN SNARE 1 [Signature]	23/01/03	14:20
Received by: Print Name and Signature	Receipt Date	Custody Seal Intact (Yes or No)
Daniel Simpson 1 [Signature]	1/4/23-10:00	N
Sample Condition Upon Receipt: Good	Custody Seal # →	

Analysis Required:

Comments: IP: 6.4  
TB: 15.8 > F luke 3



EPA Method 325 A/B  
Field Test Data Sheet and  
Chain of Custody Record

Page (x of y) 2 of 2

- ☒ Standard Turn Around Time (7 business days)  
☐ Rush Turn Around Time  
• All TATs Subject to Approval by Enthalpy Analytical, LLC  
• Unless otherwise specified, sample tubes will be conditioned for re-use 3 business days after submission of results

Site Name: US Steel Corp - Clanton Works	Client Name: Alley LLC	Field Sampling Conditions:
Site Address: 400 State Street	Project Number: 00701-0002.00	<input checked="" type="checkbox"/> Rain During Deployment / Retrieval
City: Clanton	Project Manager: Dustin Snare	<input type="checkbox"/> Sample Period w/ Continuous Rain
State: PA	Email Address: dsnare@alleyinc.com	<input type="checkbox"/> Sample Period w/ Snow or Melt
Zip: 15025	Telephone #: (610) 422-1126	<input type="checkbox"/> Other (Please explain in Notes)

Location	Sample ID (Tube ID)	Sample, Blank, or Duplicate	Start Date	Start Time	Stop Date	Stop Time	Sampler Initials	Avg. Ambient Temp. (°F)
PT09-221219-S	B18572	S	22/12/19	8:54 AM	23/01/03	9:38 AM	DAS	
PT10-221219-D	C01384	D	22/12/19	9:03 AM	23/01/03	9:45 AM	DAS	
PT10-221219-S	B27351	S	22/12/19	9:03 AM	23/01/03	9:45 AM	DAS	
PT10-221219-FB	B43014	FB	22/12/19	9:04 AM	23/01/03	9:45 AM	DAS	
PT11-221219-S	B4048	S	22/12/19	9:07 AM	23/01/03	10:01 AM	DAS	
PT12-221219-S	B50632	S	22/12/19	9:11 AM	23/01/03	10:04 AM	DAS	

Collected By: Print Name and Signature

DUSTIN SNARE

*[Signature]*

Relinquished to Shipper: Print Name and Signature

DUSTIN SNARE *[Signature]*

Received by: Print Name and Signature

Daniel Simpson

*[Signature]*

Relinquished Date

23/01/03

Receipt Date

1/4/23 - 10:00

Relinquished Time

14:20

Custody Seal Intact (Yes or No)

N

Custody Seal # →

Analysis Required:

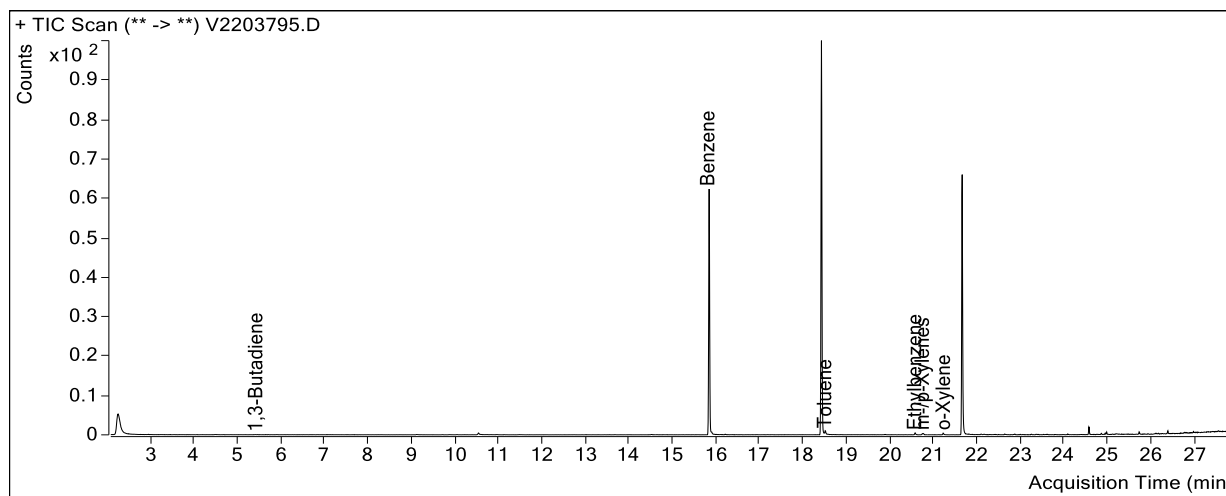
Comments:

⑥ EE Tube ID B40408, DDS 1/4/23 IP: 6.4 TB: 15.8 > Fluke 3

# Sample Chromatograms



Sample Name : 2023EE101 Method Blank-1  
Sample Info : B18442  
Data File : V2203795.D  
Acquisition Date : 2023-01-16 13:44:32  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR

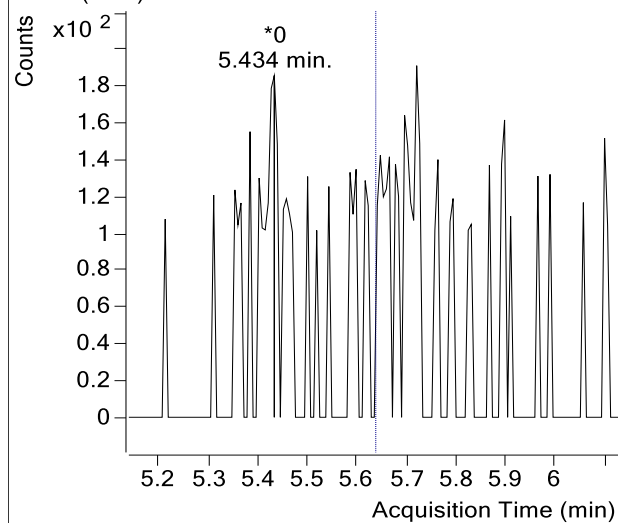


Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	0	m
Benzene-d6 (IS)	15.86	777,127	
Benzene	15.92	10,341	m
Toluene-d8 (IS)	18.45	854,358	
Toluene	18.53	8,374	
Ethylbenzene	20.59	5,646	
m-/p-Xylenes	20.78	5,385	m
o-Xylene	21.24	4,399	

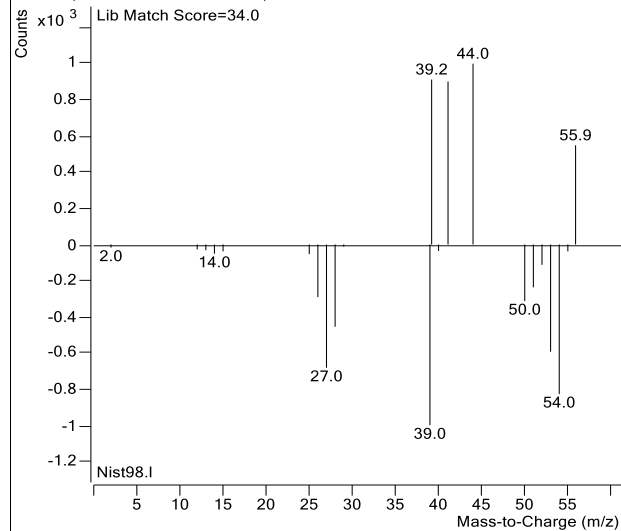
(m)=Manual Integration

## 1,3-Butadiene

+ EIC (39.0) Scan V2203795.D

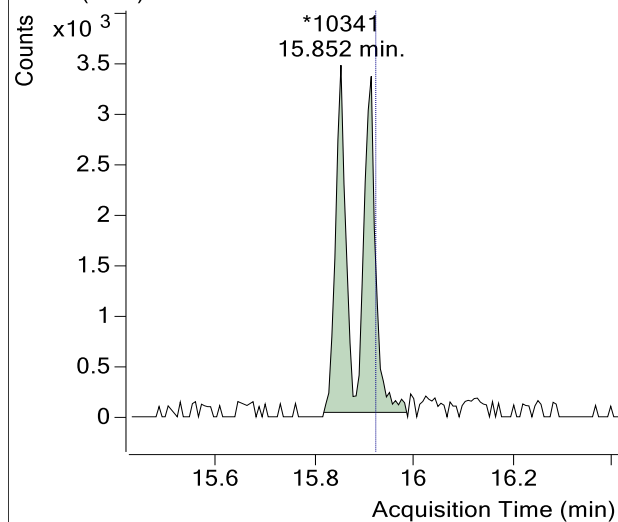


+ Scan (5.434-5.434 min, 1 scans) V2203795.D

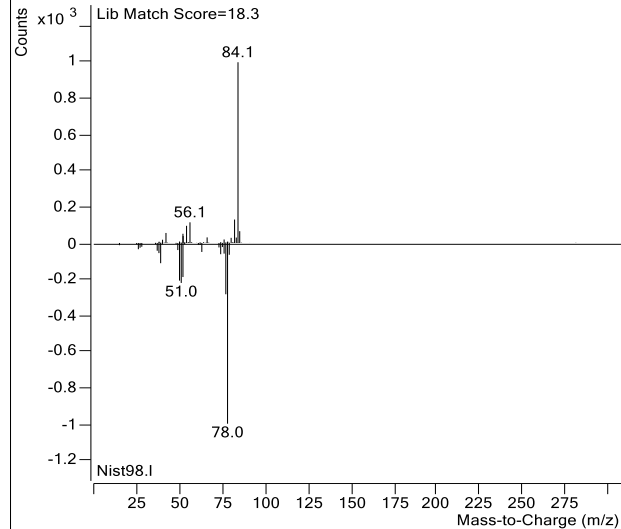


## Benzene

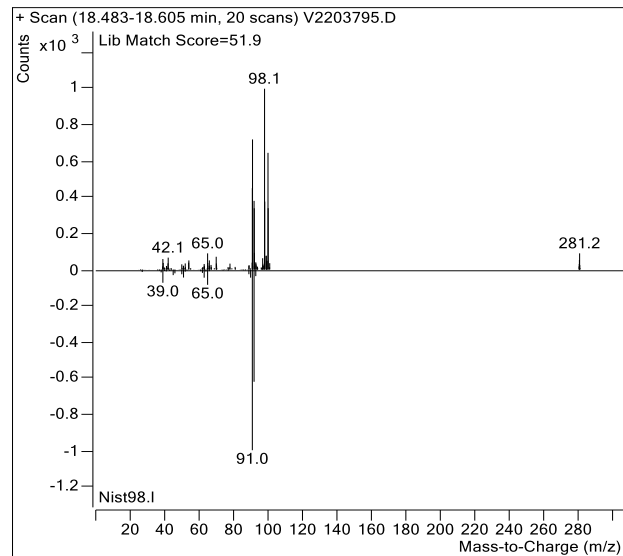
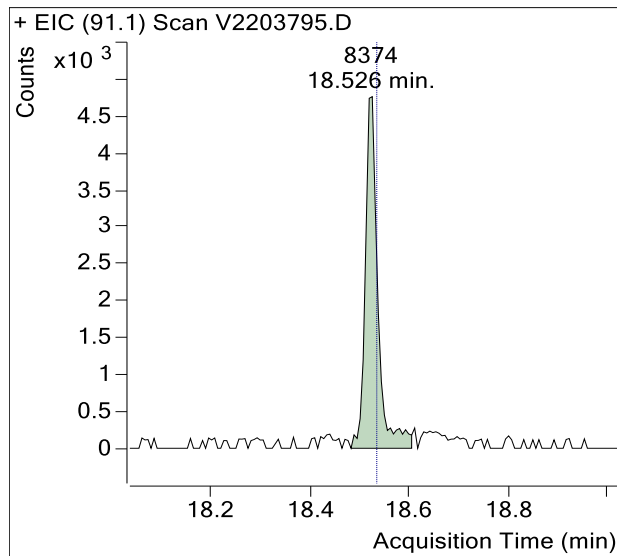
+ EIC (78.1) Scan V2203795.D



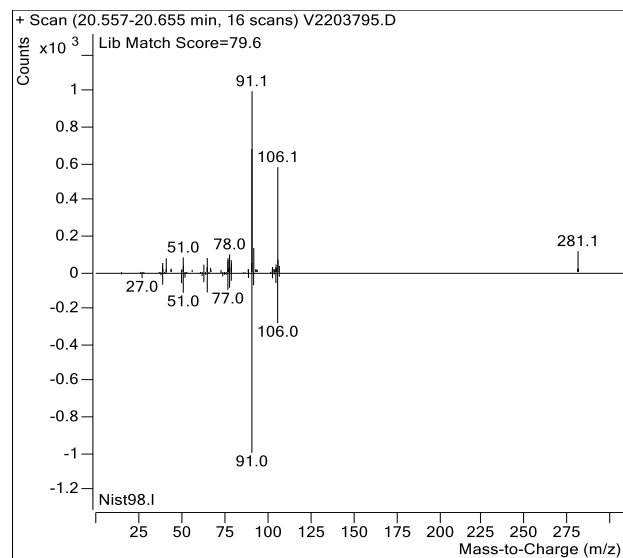
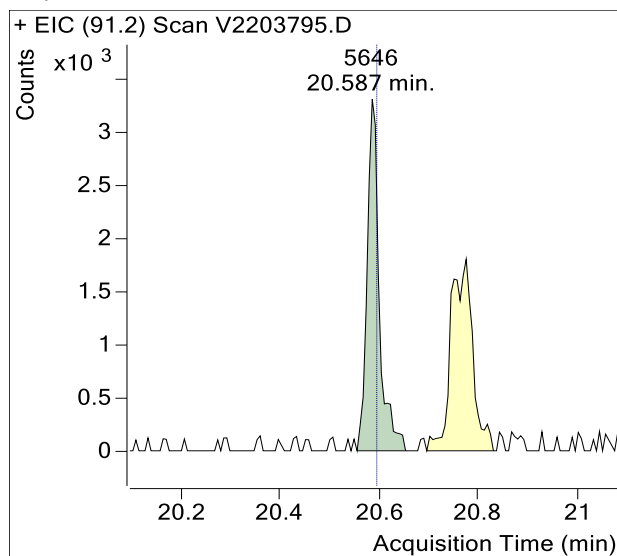
+ Scan (15.818-15.985 min, 28 scans) V2203795.D



## Toluene

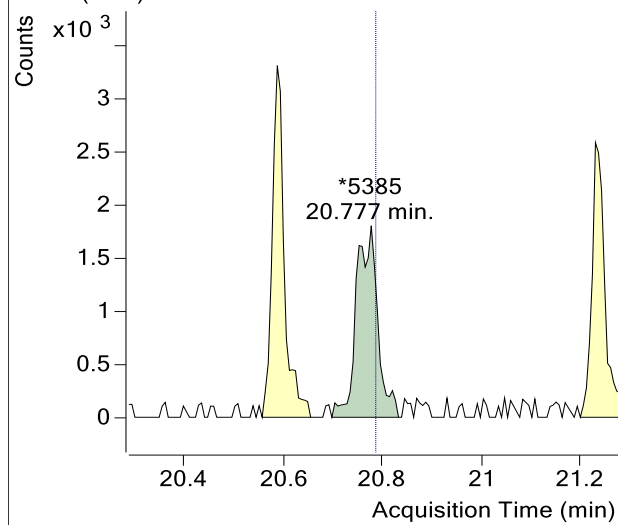


## Ethylbenzene

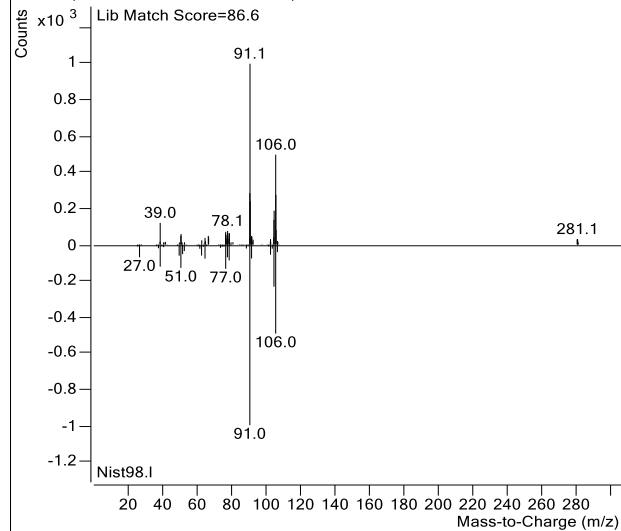


## m-/p-Xylenes

+ EIC (91.1) Scan V2203795.D

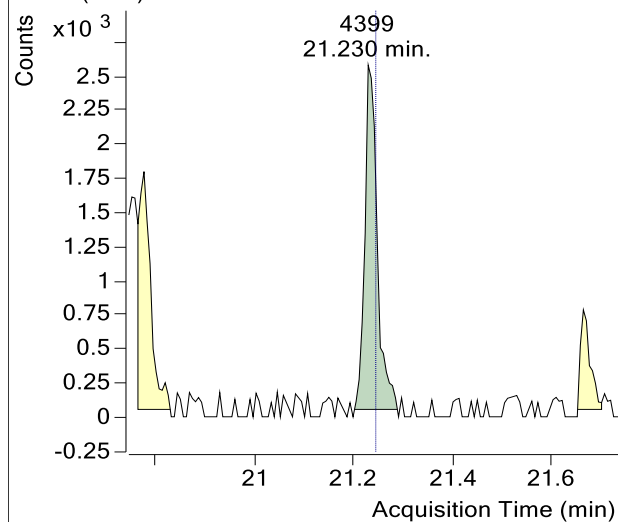


+ Scan (20.697-20.832 min, 23 scans) V2203795.D

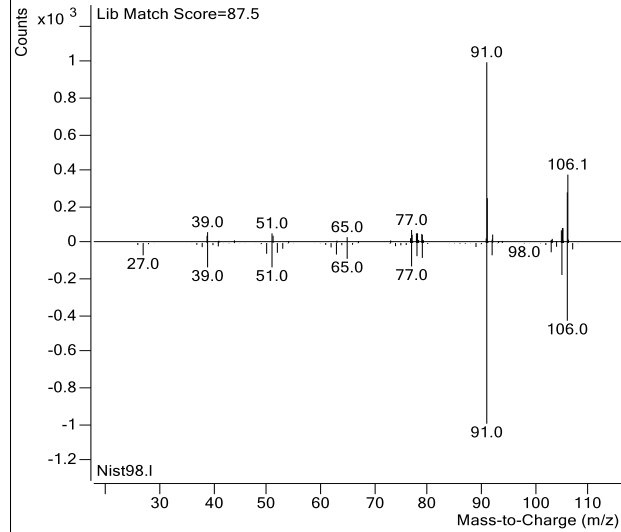


## o-Xylene

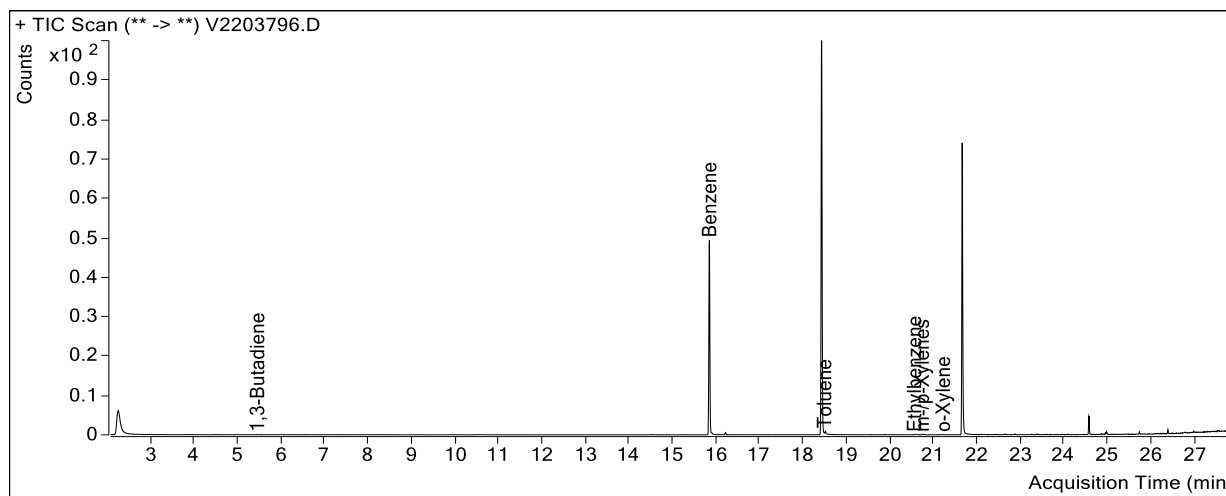
+ EIC (91.2) Scan V2203795.D



+ Scan (21.202-21.289 min, 15 scans) V2203795.D



Sample Name : USSCL-PT10-B-20221219  
Sample Info : B43014  
Data File : V2203796.D  
Acquisition Date : 2023-01-16 14:28:42  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR

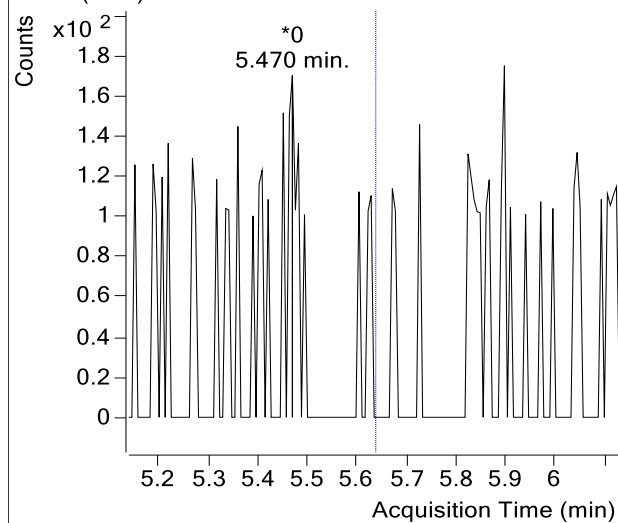


Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	0	m
Benzene-d6 (IS)	15.86	608,046	
Benzene	15.92	6,442	m
Toluene-d8 (IS)	18.45	846,010	
Toluene	18.53	6,531	
Ethylbenzene	20.59	2,060	
m-/p-Xylenes	20.78	1,898	
o-Xylene	21.24	981	

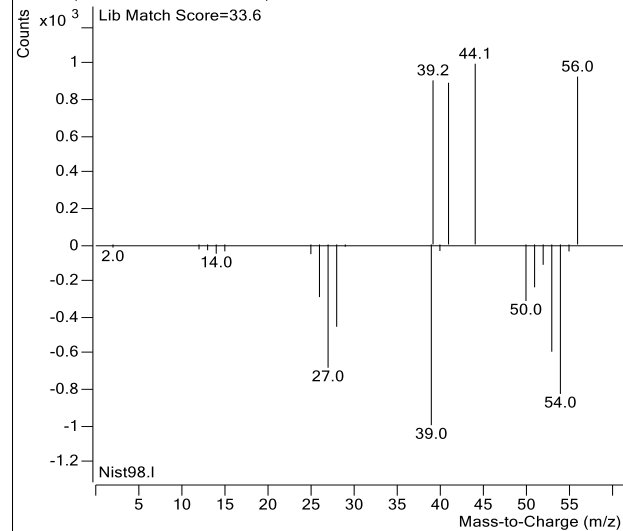
(m)=Manual Integration

## 1,3-Butadiene

+ EIC (39.0) Scan V2203796.D

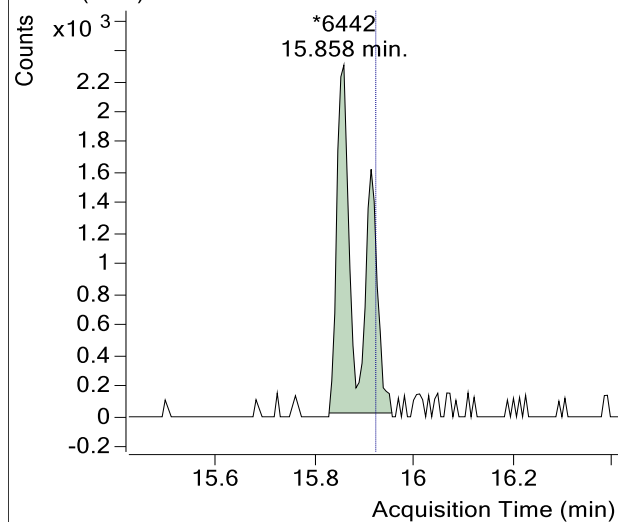


+ Scan (5.470-5.470 min, 1 scans) V2203796.D

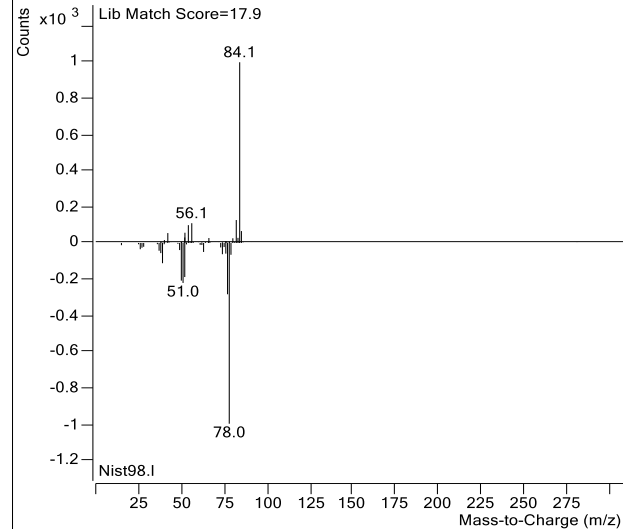


## Benzene

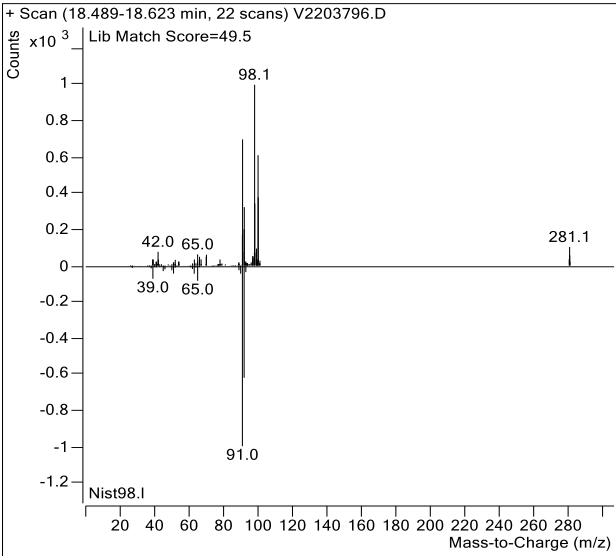
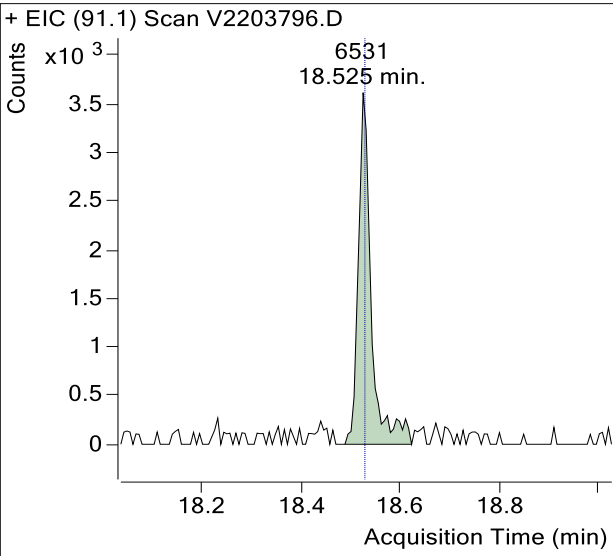
+ EIC (78.1) Scan V2203796.D



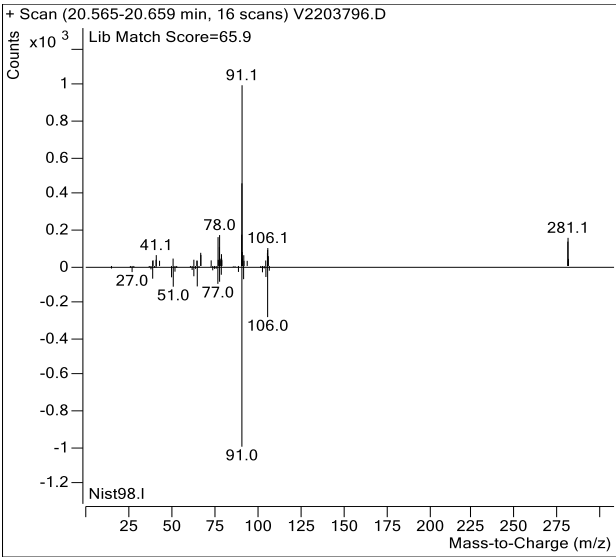
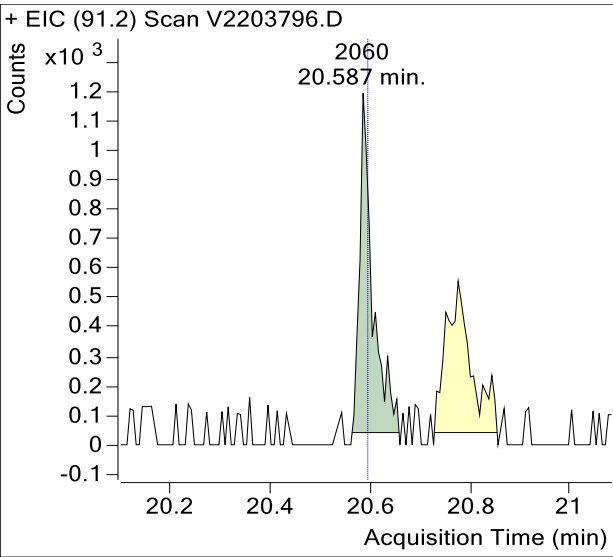
+ Scan (15.828-15.955 min, 21 scans) V2203796.D



Toluene

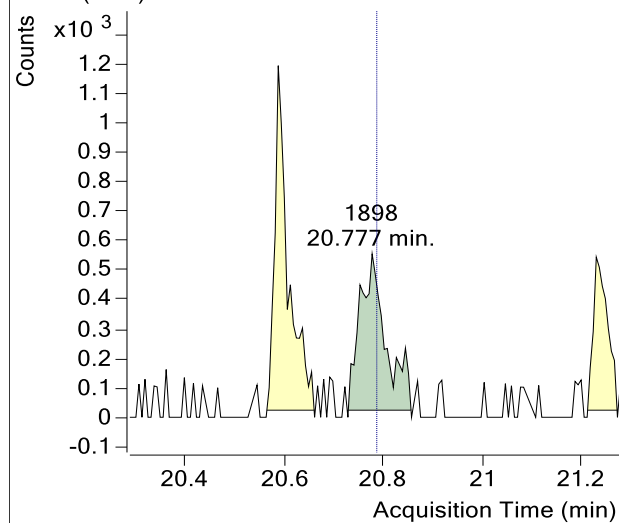


Ethylbenzene

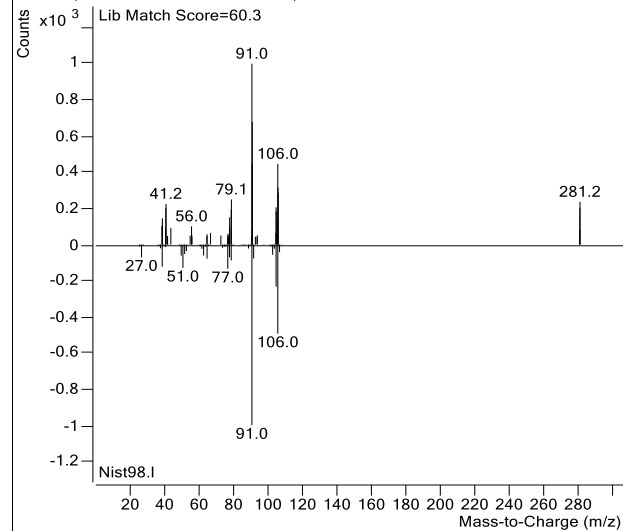


## m-/p-Xylenes

+ EIC (91.1) Scan V2203796.D

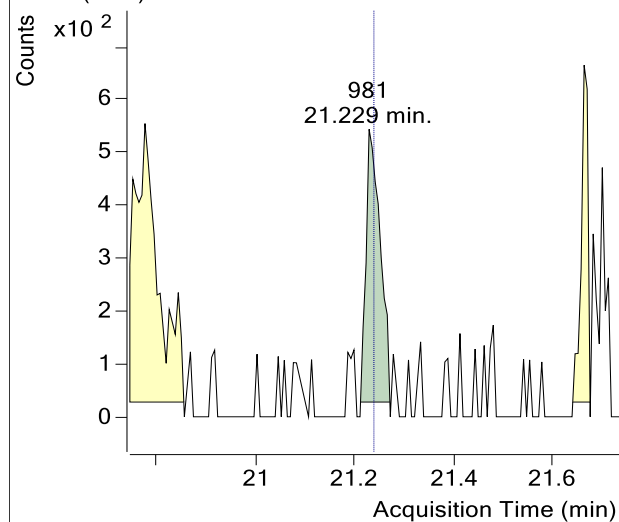


+ Scan (20.729-20.855 min, 21 scans) V2203796.D

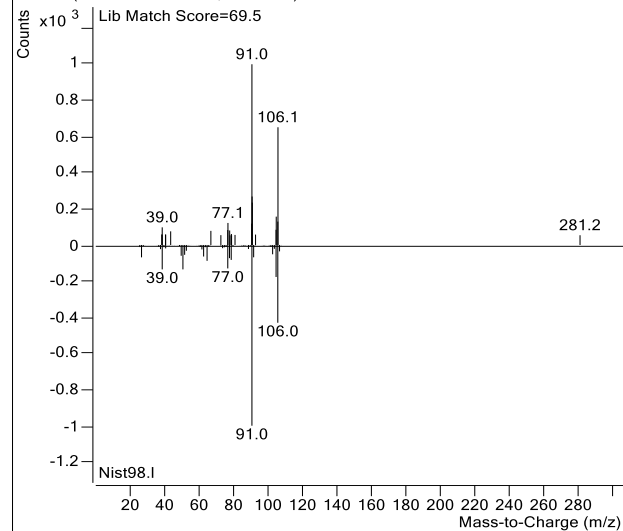


## o-Xylene

+ EIC (91.2) Scan V2203796.D

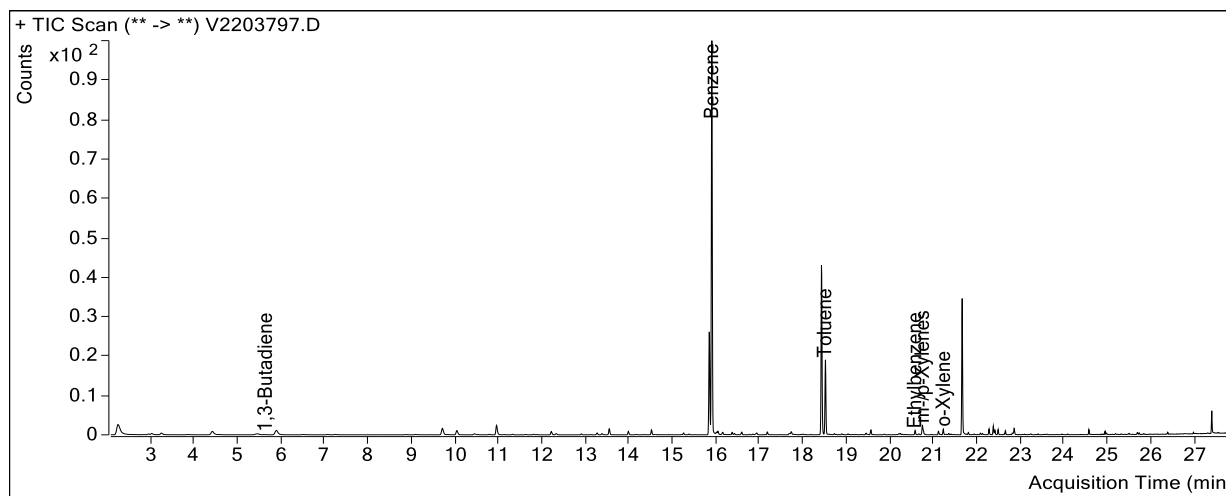


+ Scan (21.212-21.271 min, 10 scans) V2203796.D





Sample Name : USSCL-PT01-S-20221219  
Sample Info : B10423  
Data File : V2203797.D  
Acquisition Date : 2023-01-16 15:12:02  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR

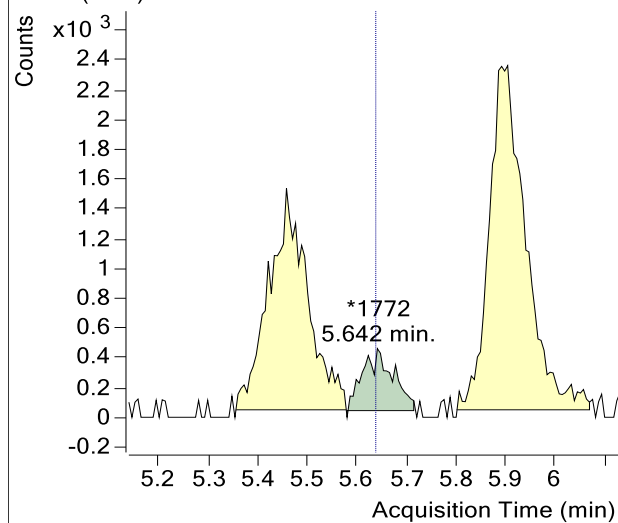


Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	1,772	m
Benzene-d6 (IS)	15.86	786,253	
Benzene	15.92	2,657,410	
Toluene-d8 (IS)	18.45	851,420	
Toluene	18.53	404,983	
Ethylbenzene	20.59	22,511	
m-/p-Xylenes	20.78	55,554	
o-Xylene	21.24	22,338	

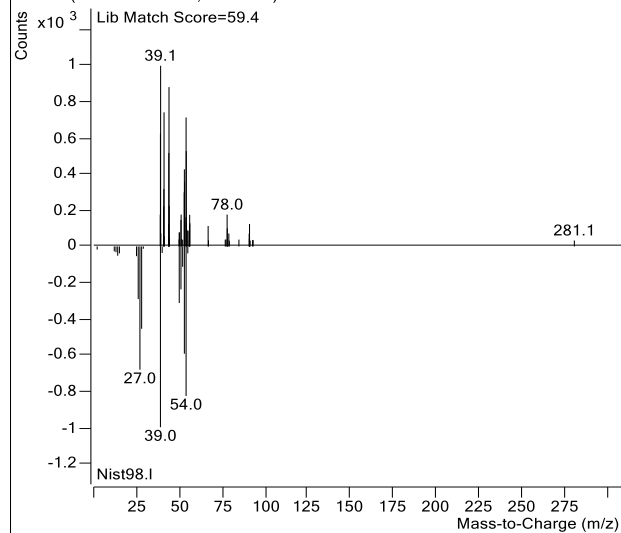
(m)=Manual Integration

## 1,3-Butadiene

+ EIC (39.0) Scan V2203797.D

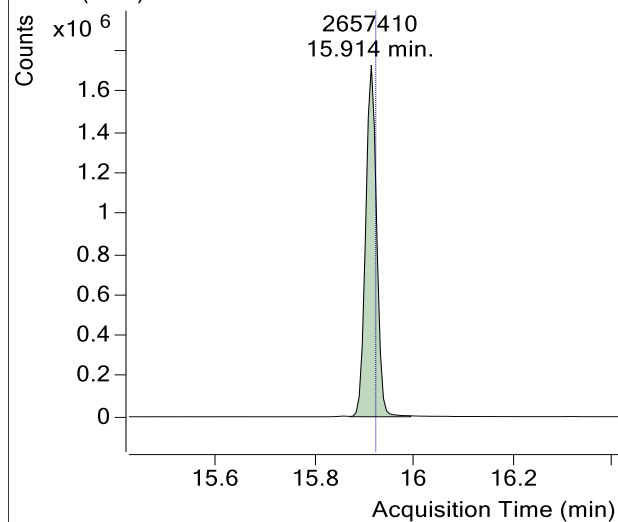


+ Scan (5.581-5.715 min, 22 scans) V2203797.D

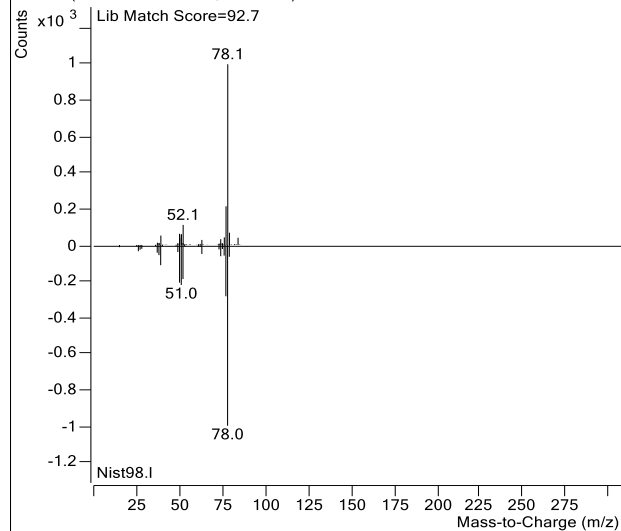


## Benzene

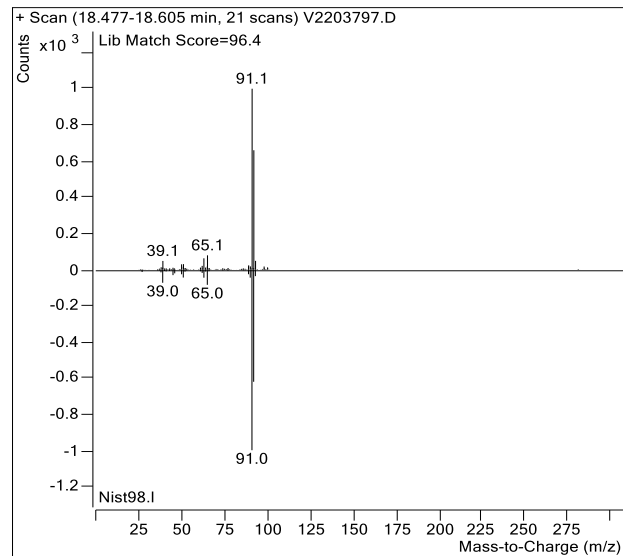
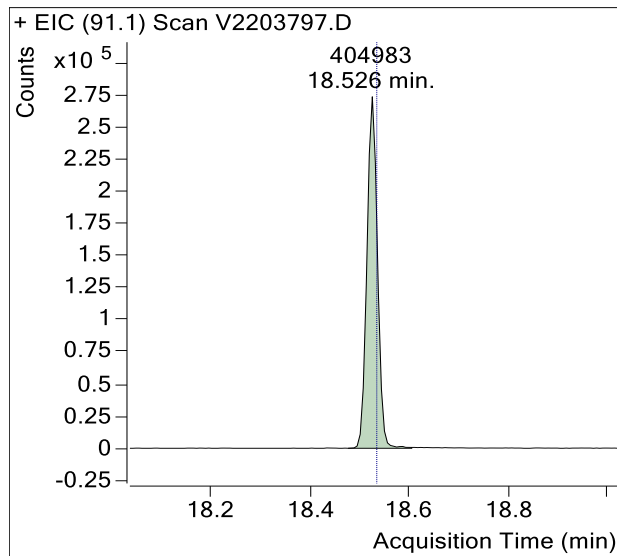
+ EIC (78.1) Scan V2203797.D



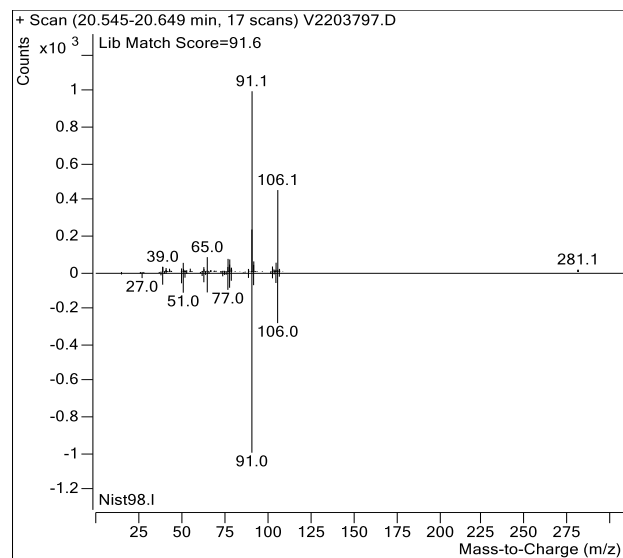
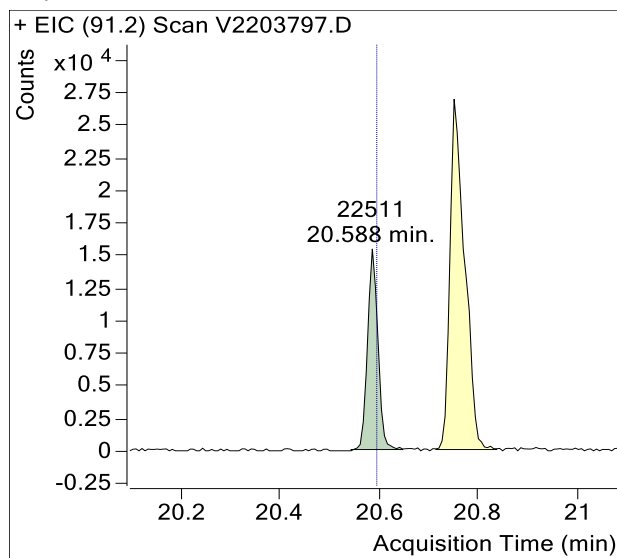
+ Scan (15.871-15.993 min, 20 scans) V2203797.D



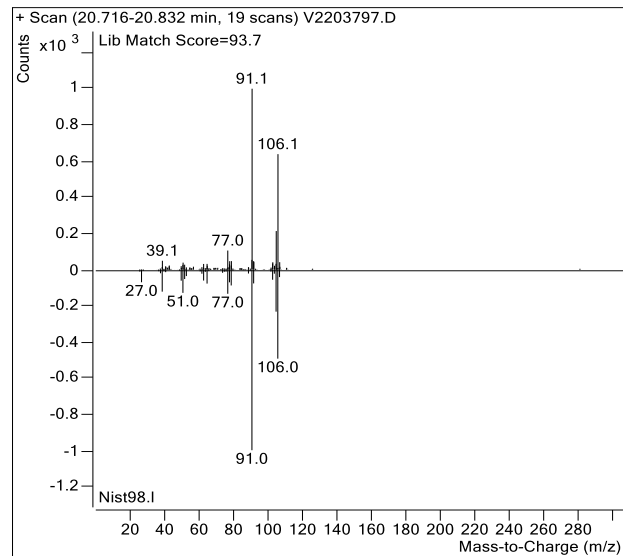
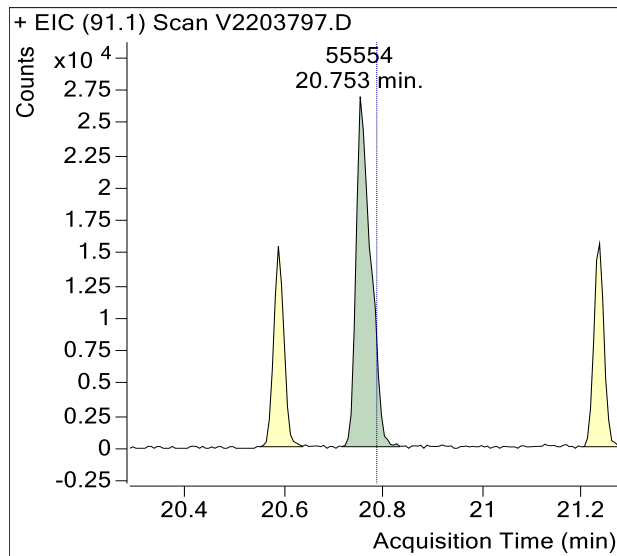
## Toluene



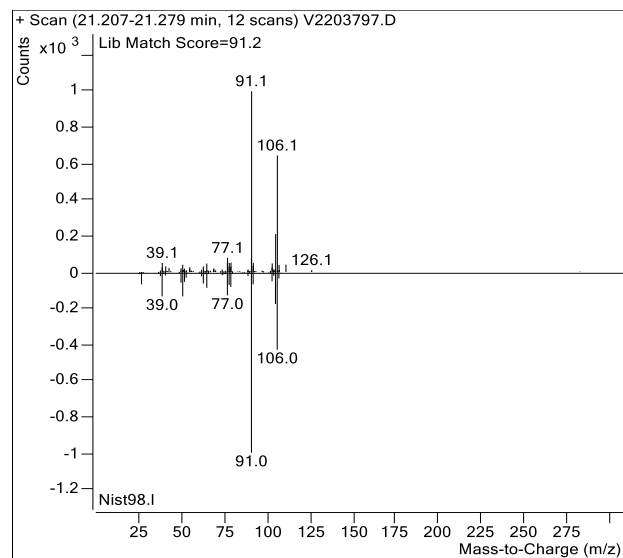
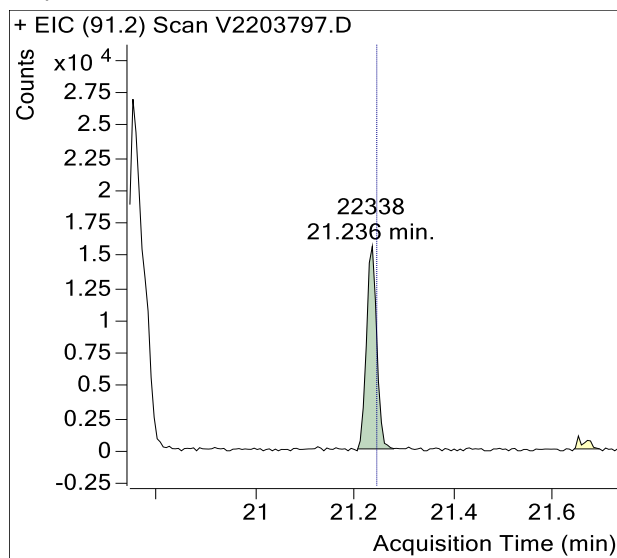
## Ethylbenzene



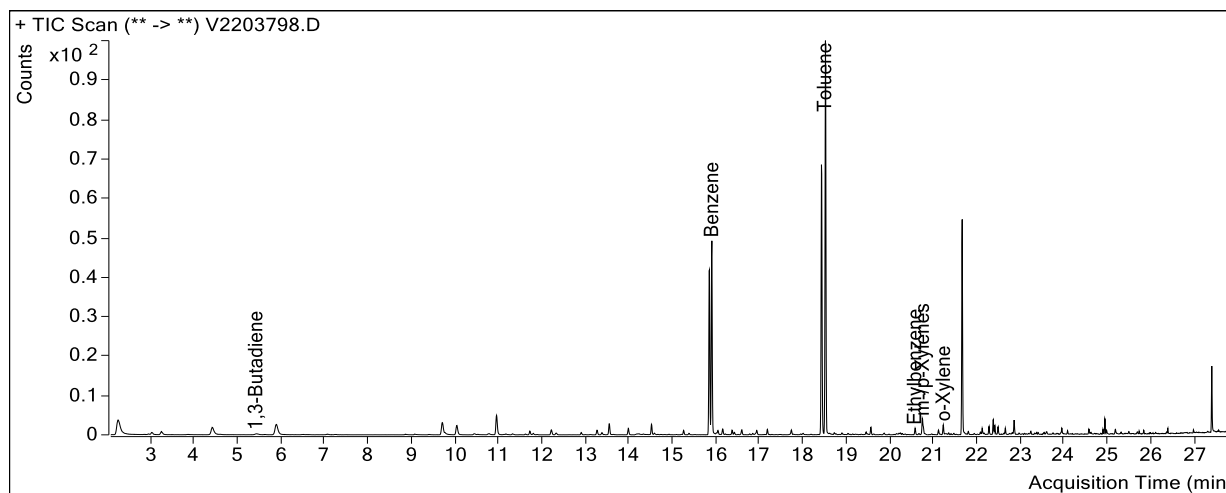
## m-/p-Xylenes



## o-Xylene



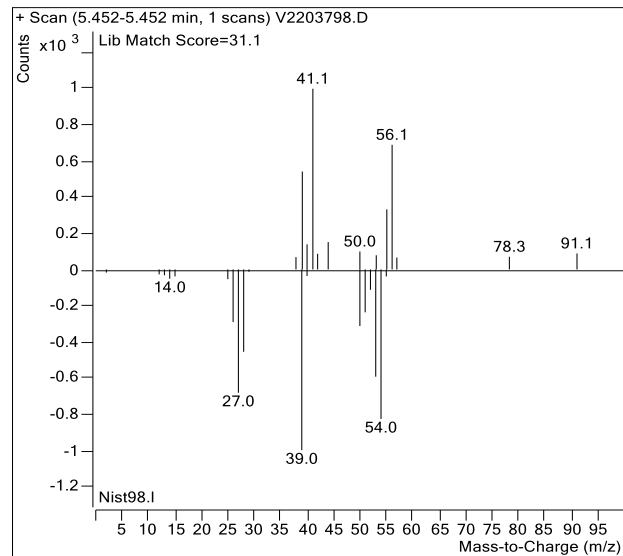
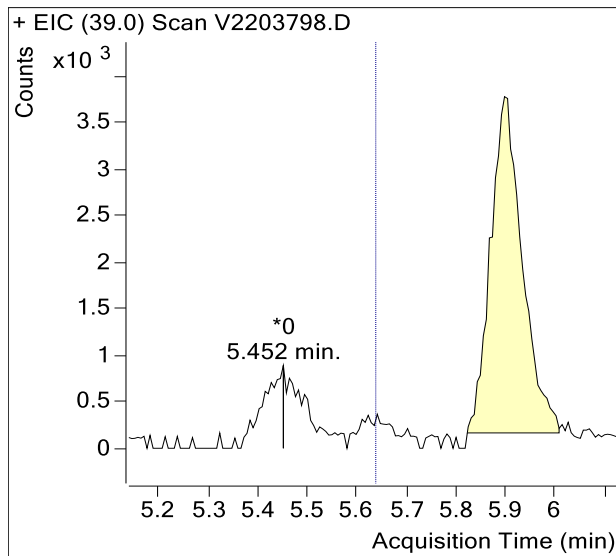
Sample Name : USSCL-PT02-S-20221219  
Sample Info : B12142  
Data File : V2203798.D  
Acquisition Date : 2023-01-16 15:55:03  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR



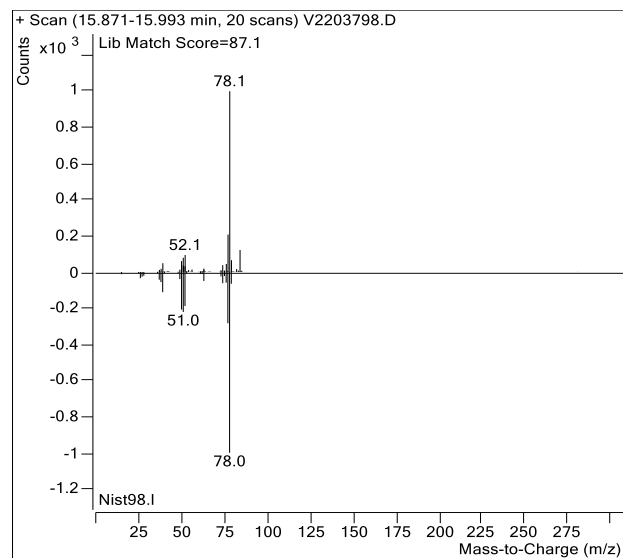
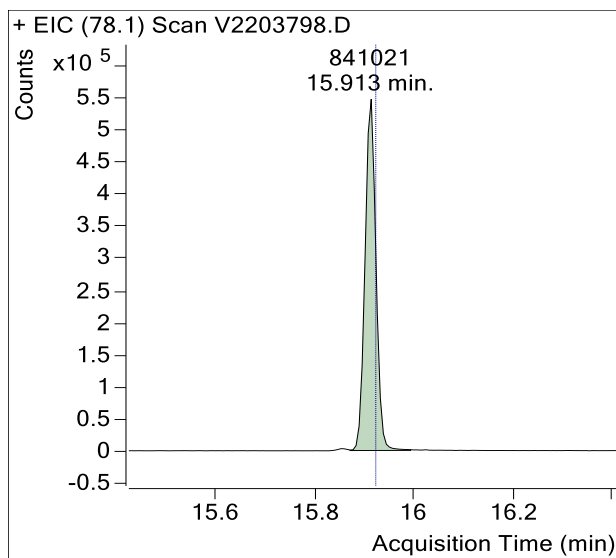
Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	0	m
Benzene-d6 (IS)	15.86	787,633	
Benzene	15.92	841,021	
Toluene-d8 (IS)	18.45	861,094	
Toluene	18.53	1,338,949	
Ethylbenzene	20.59	21,950	
m-/p-Xylenes	20.78	62,827	
o-Xylene	21.24	26,277	

(m)=Manual Integration

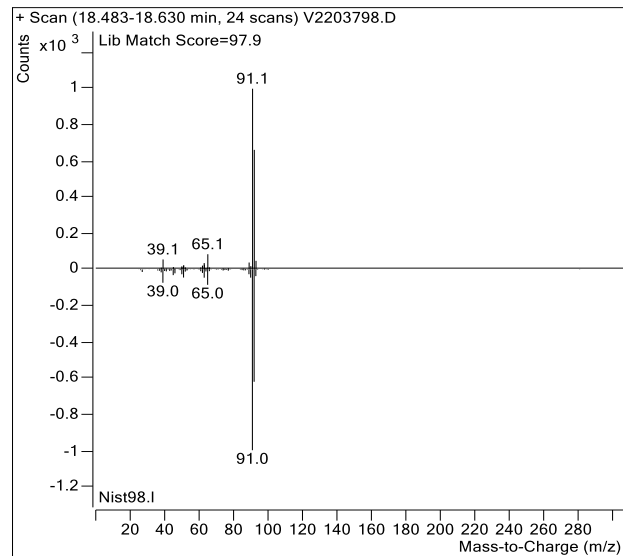
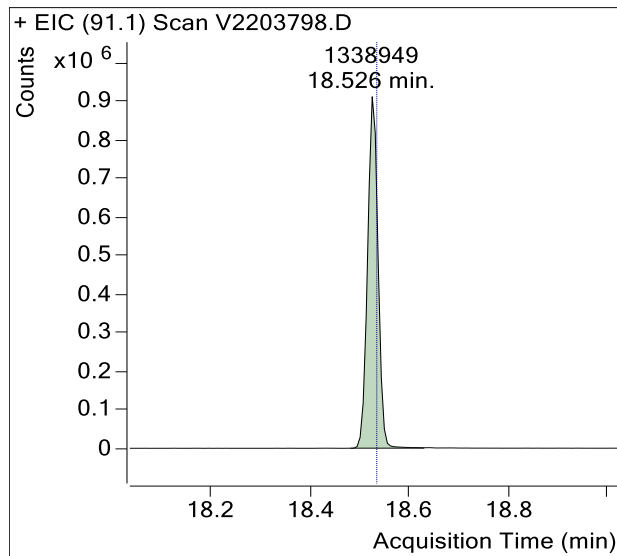
## 1,3-Butadiene



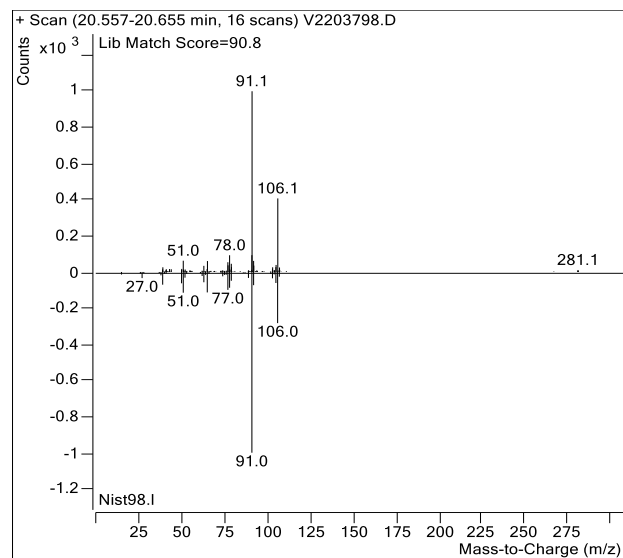
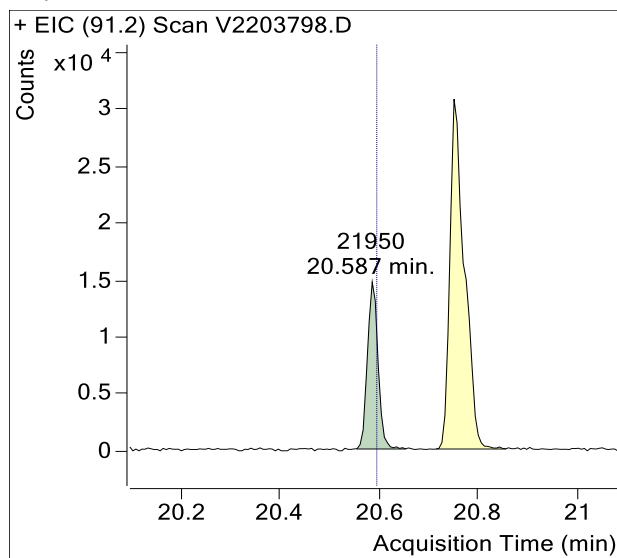
## Benzene



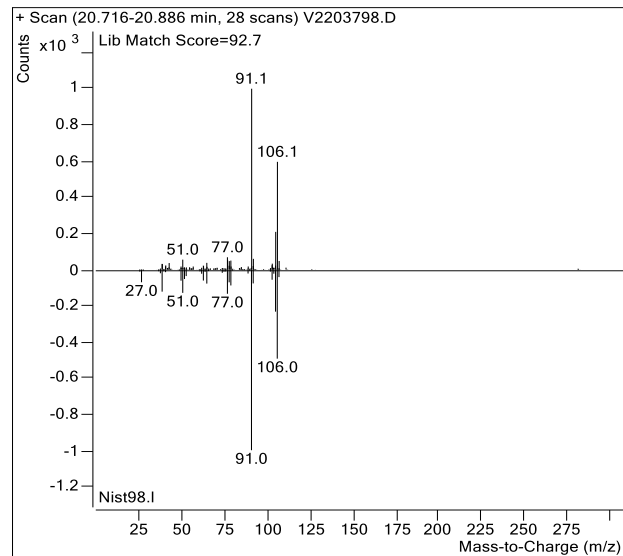
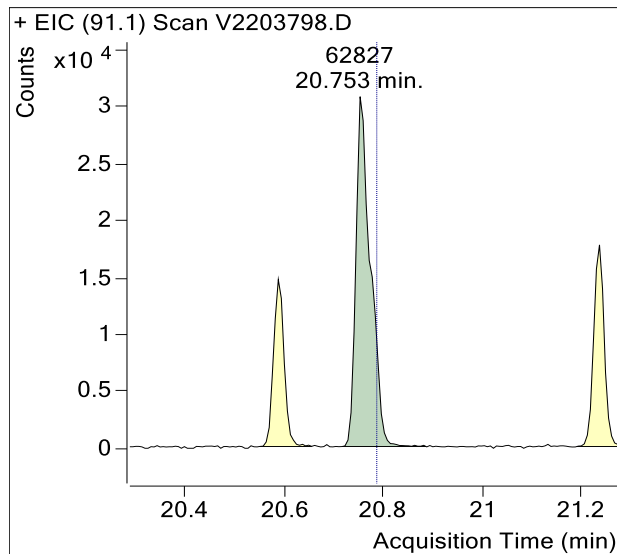
## Toluene



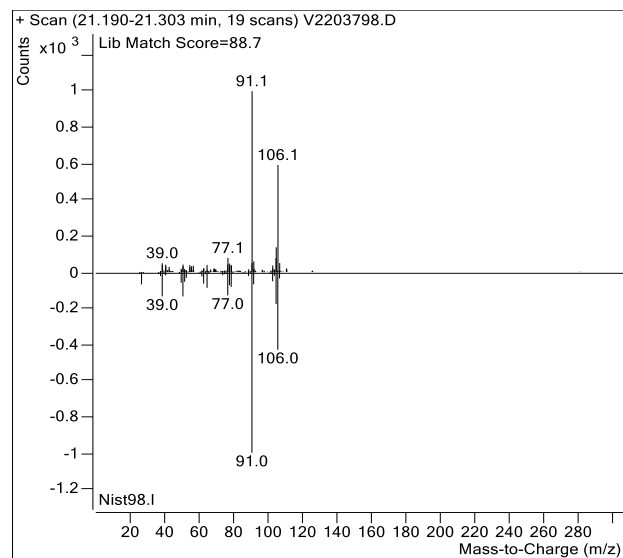
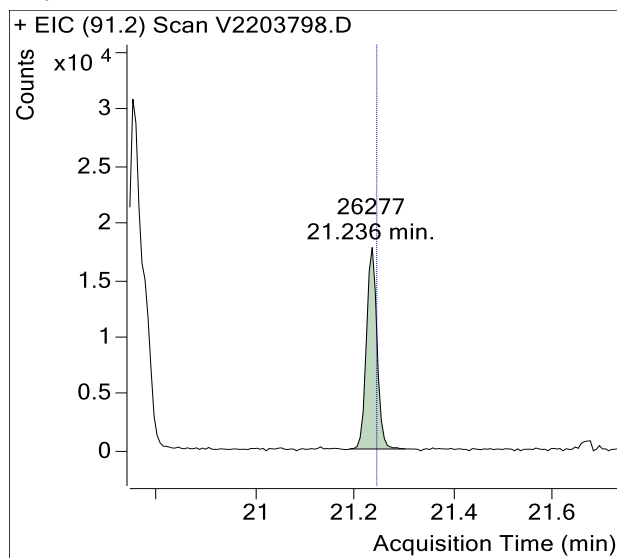
## Ethylbenzene



## m-/p-Xylenes

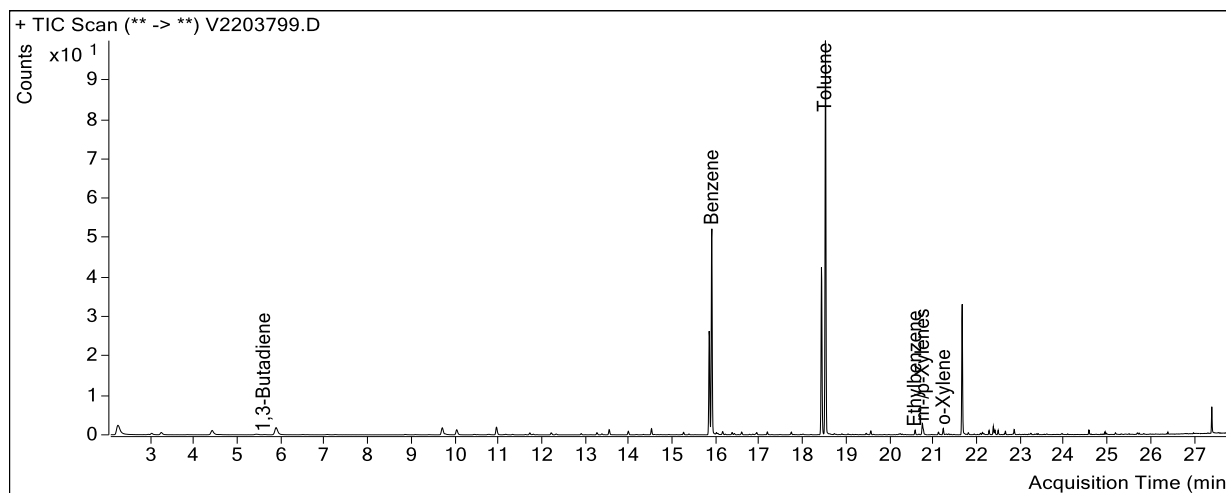


## o-Xylene





Sample Name : USSCL-PT03-S-20221219  
Sample Info : B17169  
Data File : V2203799.D  
Acquisition Date : 2023-01-16 16:37:52  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR

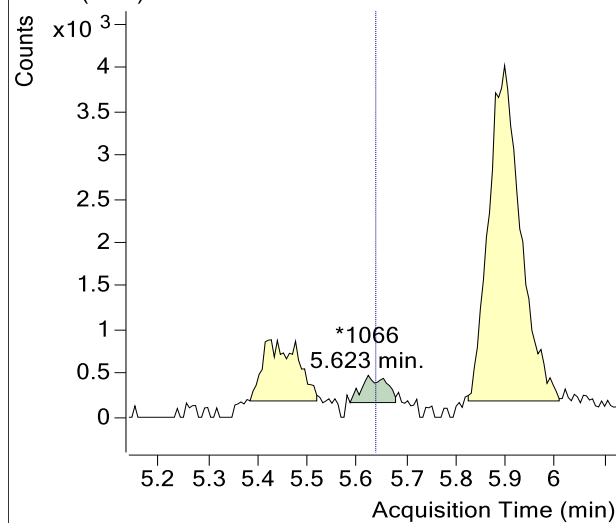


Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	1,066	m
Benzene-d6 (IS)	15.86	792,077	
Benzene	15.92	1,465,646	
Toluene-d8 (IS)	18.45	867,512	
Toluene	18.53	2,180,071	
Ethylbenzene	20.59	24,124	
m-/p-Xylenes	20.78	70,777	
o-Xylene	21.24	27,722	

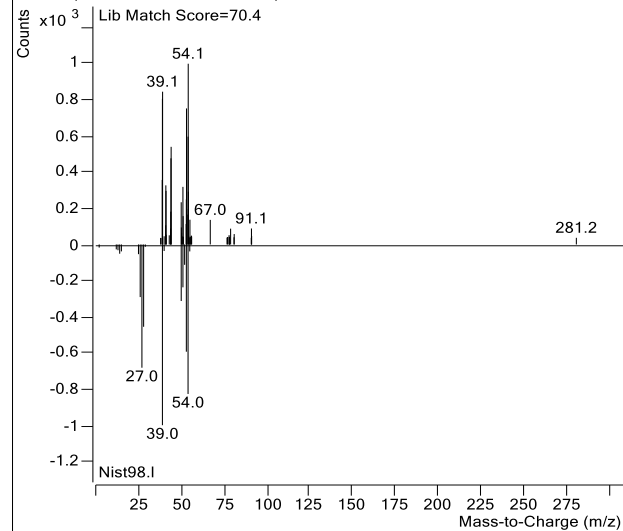
(m)=Manual Integration

## 1,3-Butadiene

+ EIC (39.0) Scan V2203799.D

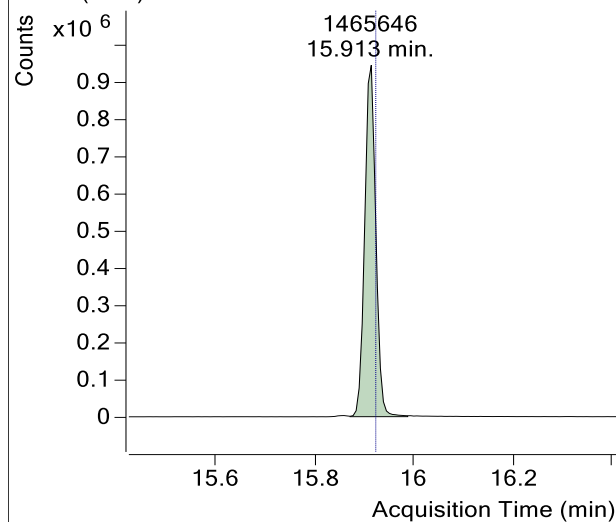


+ Scan (5.587-5.678 min, 15 scans) V2203799.D

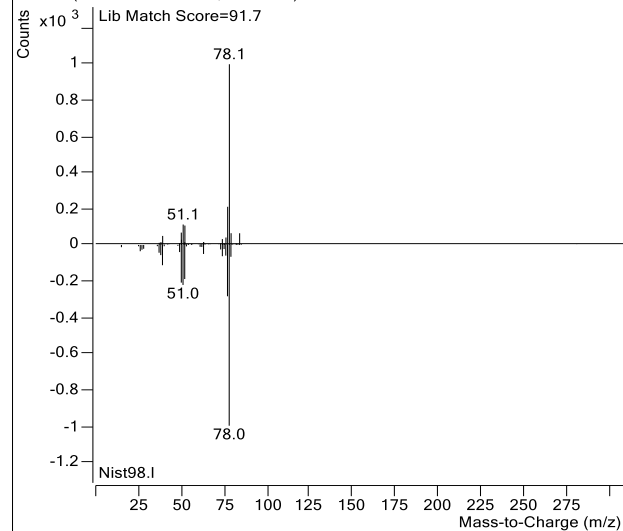


## Benzene

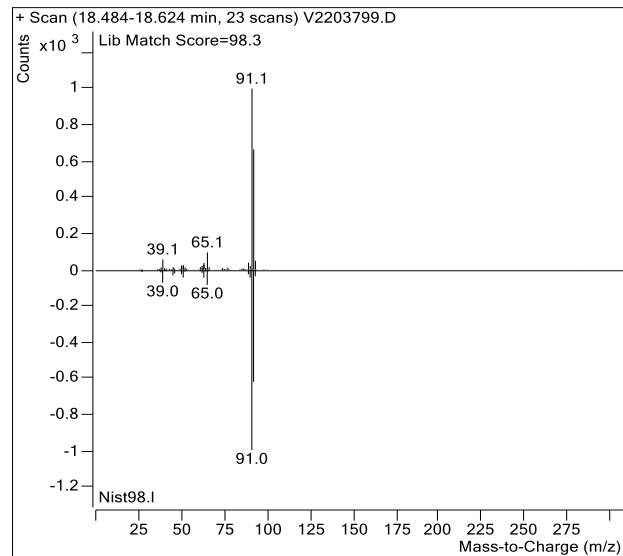
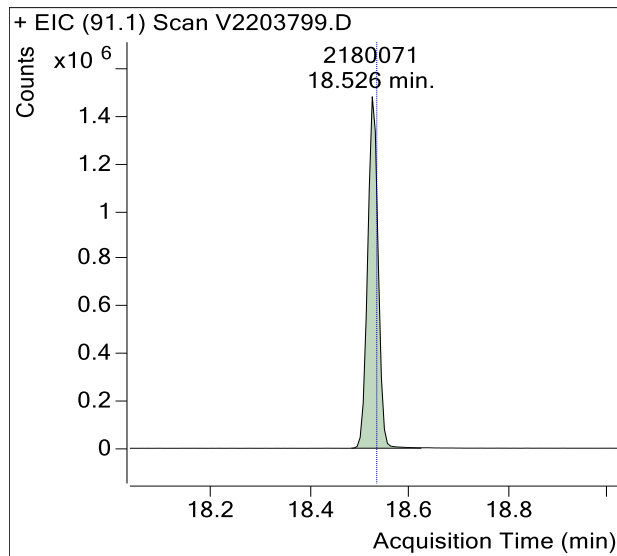
+ EIC (78.1) Scan V2203799.D



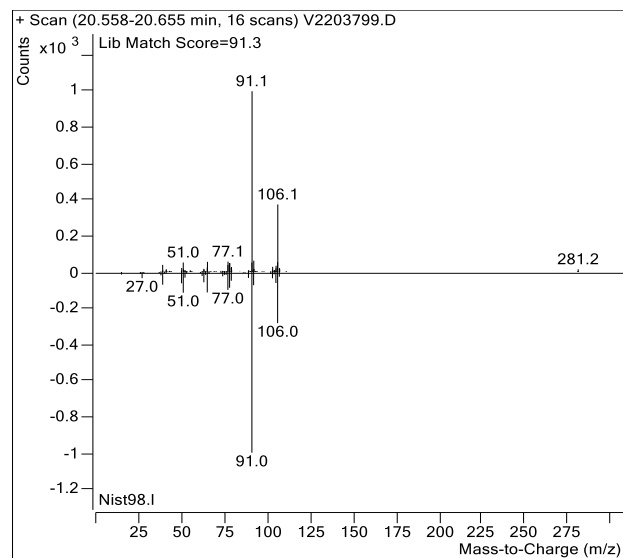
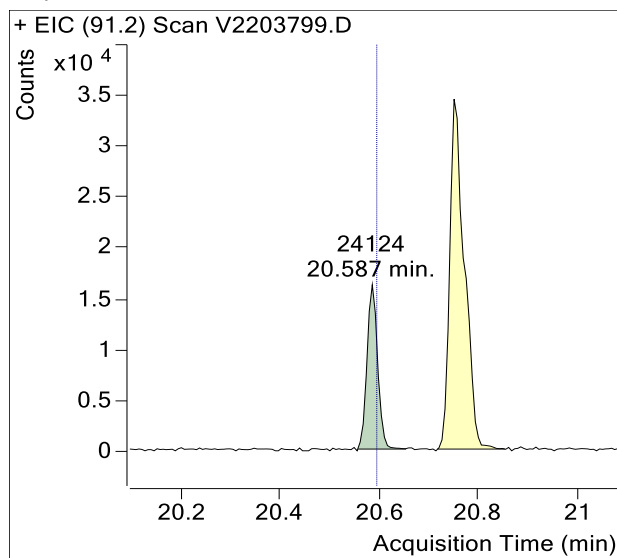
+ Scan (15.871-15.987 min, 20 scans) V2203799.D



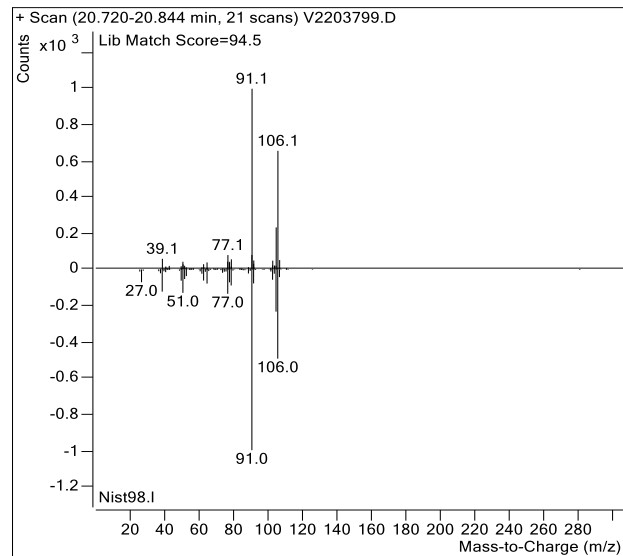
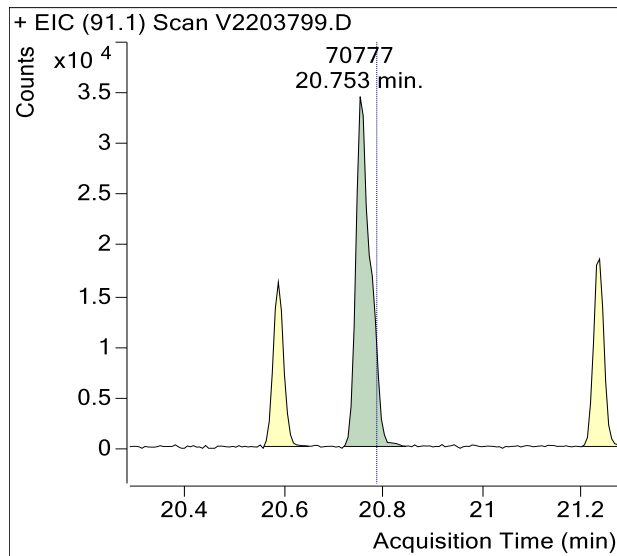
## Toluene



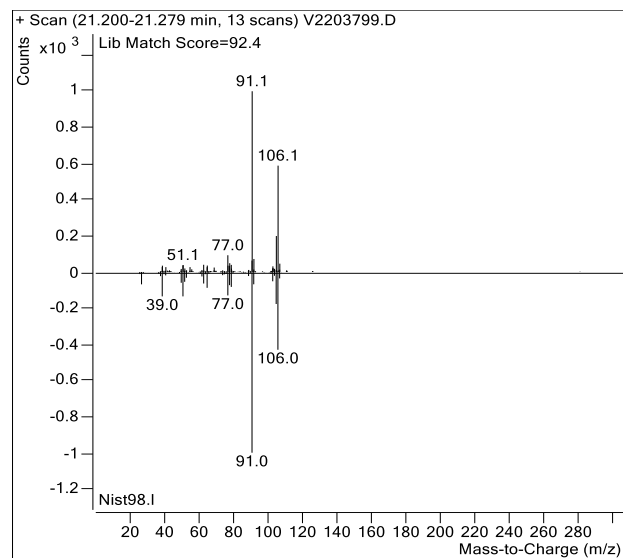
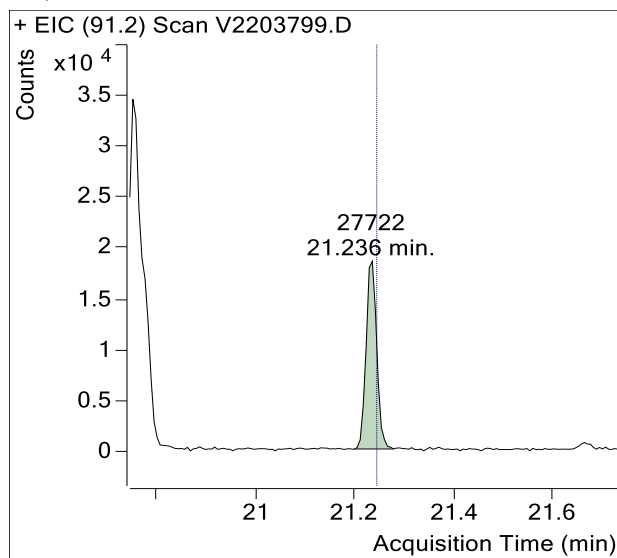
## Ethylbenzene



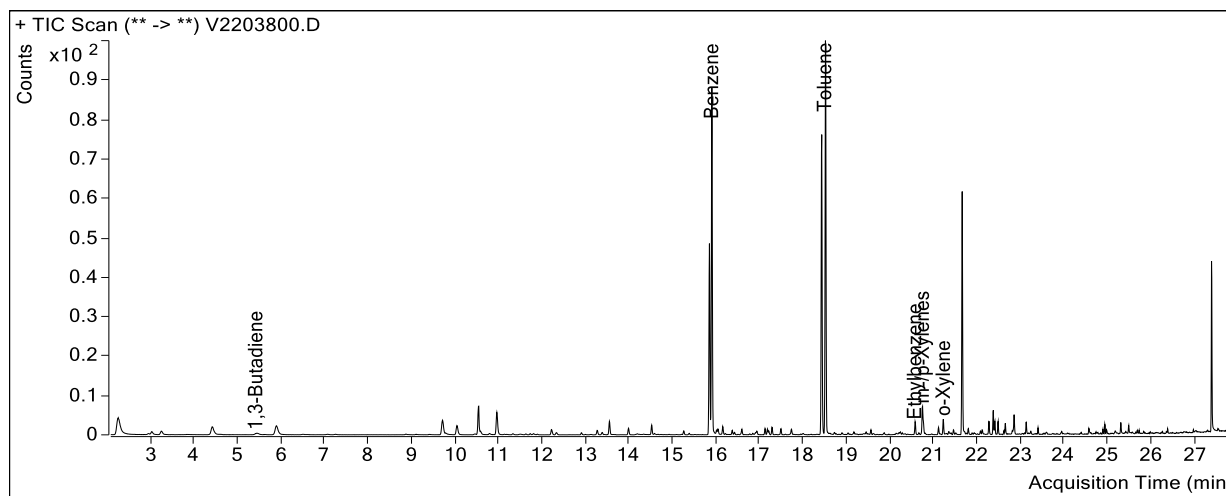
## m-/p-Xylenes



## o-Xylene



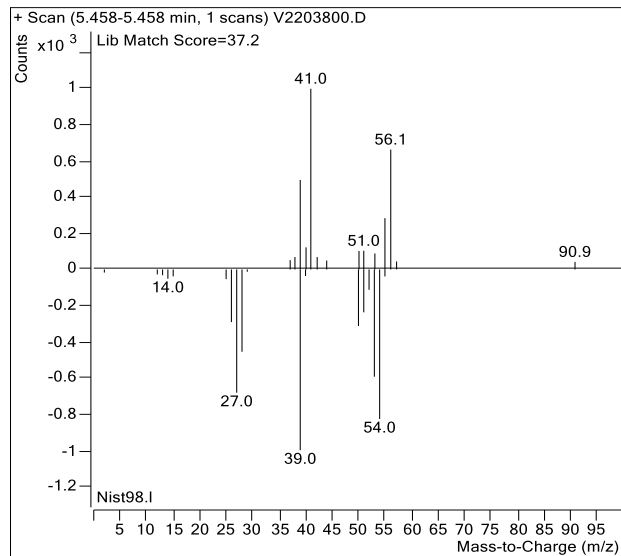
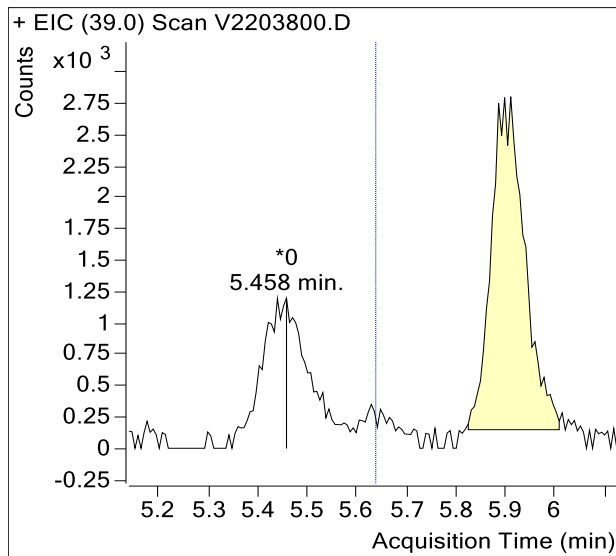
Sample Name : USSCL-PT04-S-20221219  
Sample Info : B44250  
Data File : V2203800.D  
Acquisition Date : 2023-01-16 17:20:11  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR



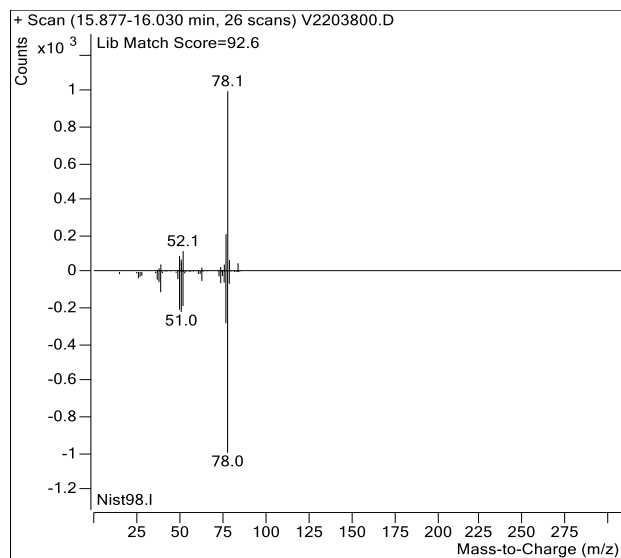
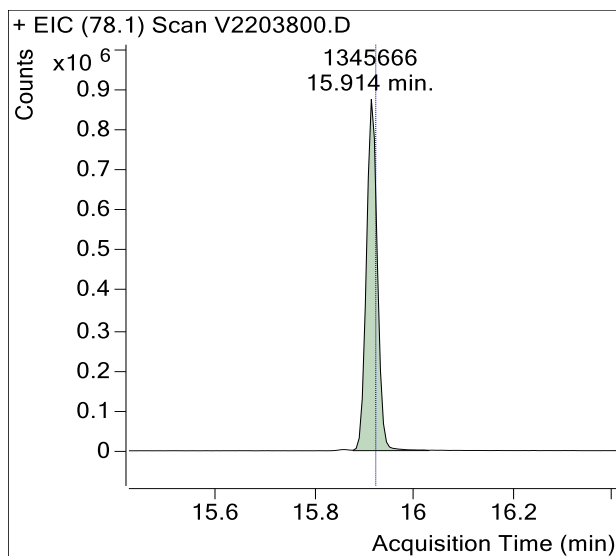
Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	0	m
Benzene-d6 (IS)	15.86	786,026	
Benzene	15.92	1,345,666	
Toluene-d8 (IS)	18.45	860,467	
Toluene	18.53	1,251,017	
Ethylbenzene	20.59	40,864	
m-/p-Xylenes	20.78	96,936	
o-Xylene	21.24	35,815	

(m)=Manual Integration

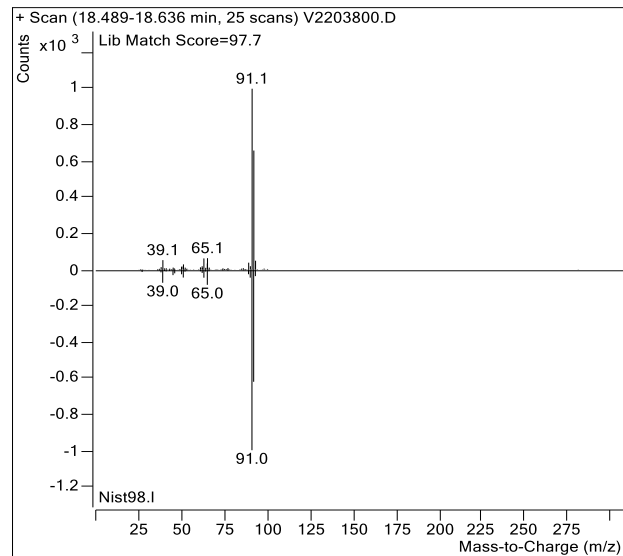
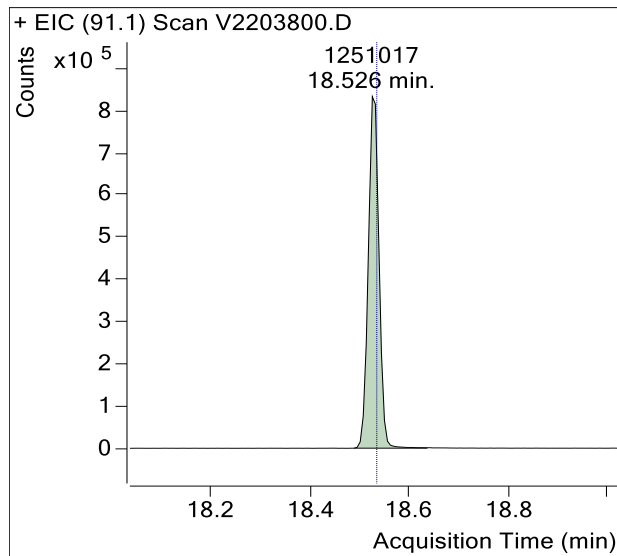
## 1,3-Butadiene



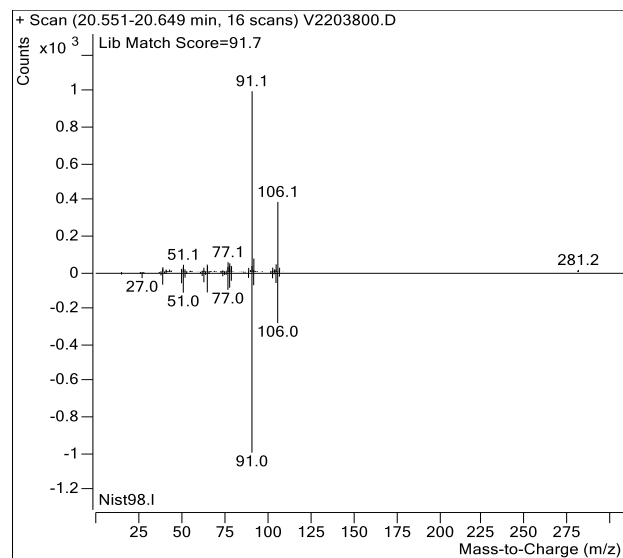
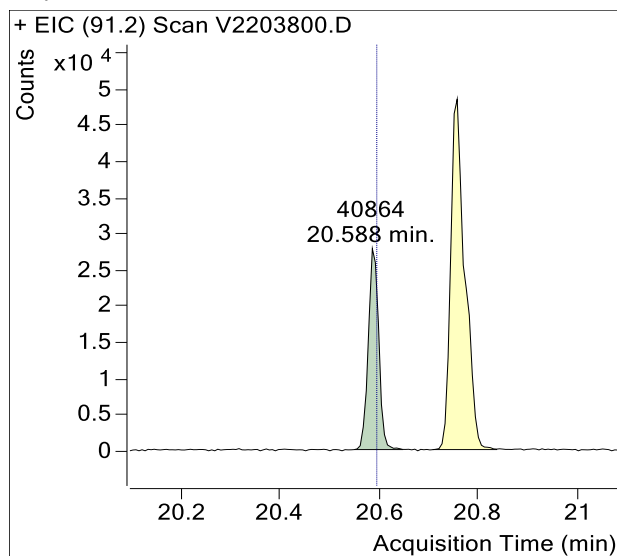
## Benzene



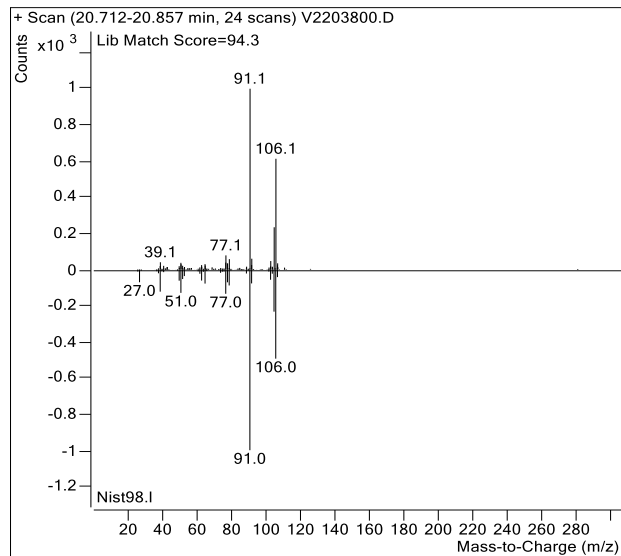
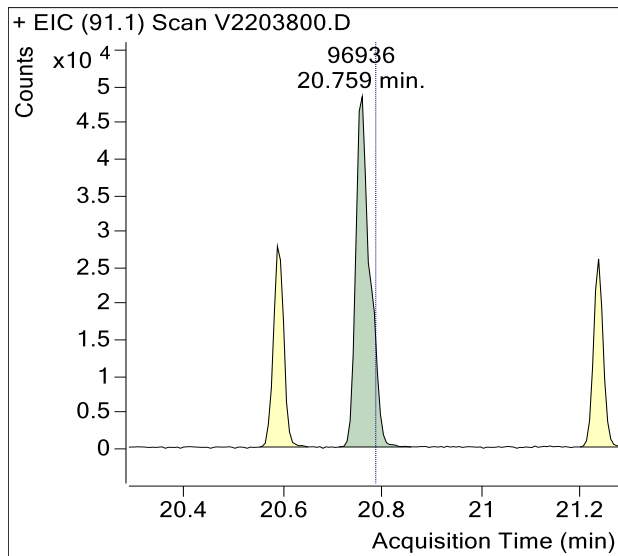
## Toluene



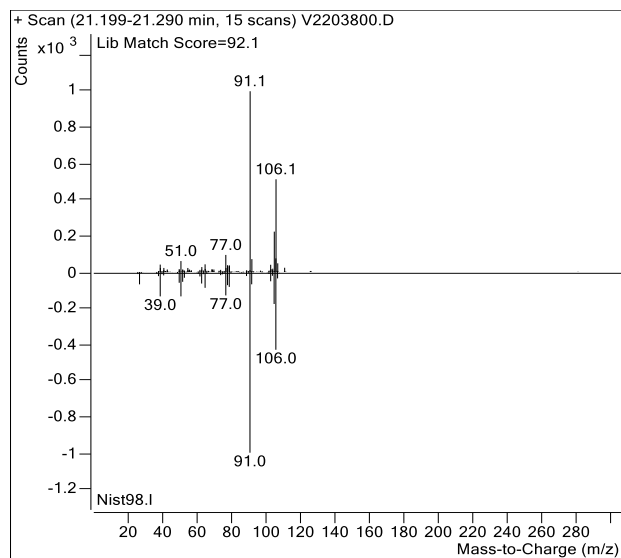
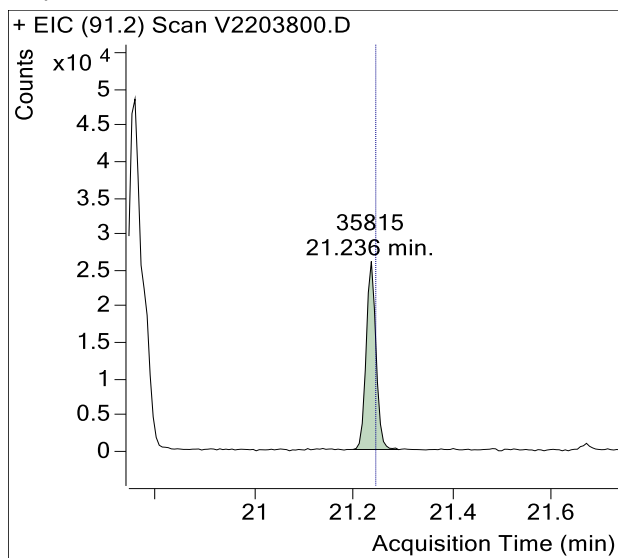
## Ethylbenzene



## m-/p-Xylenes

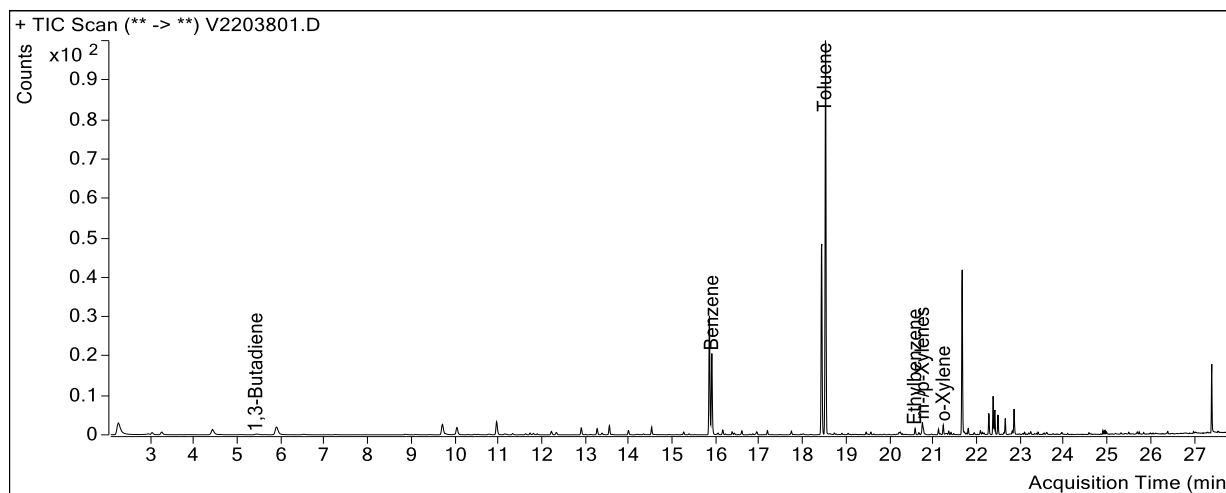


## o-Xylene





Sample Name : USSCL-PT05-S-20221219  
Sample Info : B52726  
Data File : V2203801.D  
Acquisition Date : 2023-01-16 18:02:11  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR

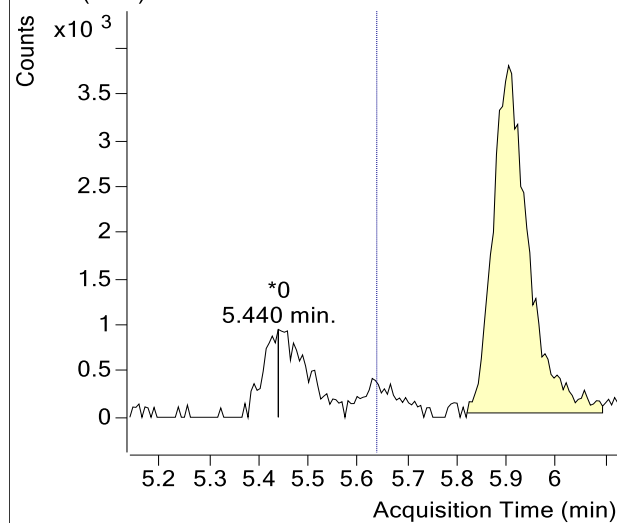


Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	0	m
Benzene-d6 (IS)	15.86	811,475	
Benzene	15.92	523,975	
Toluene-d8 (IS)	18.45	892,050	
Toluene	18.53	2,014,470	
Ethylbenzene	20.59	29,629	
m-/p-Xylenes	20.78	69,770	
o-Xylene	21.24	35,054	

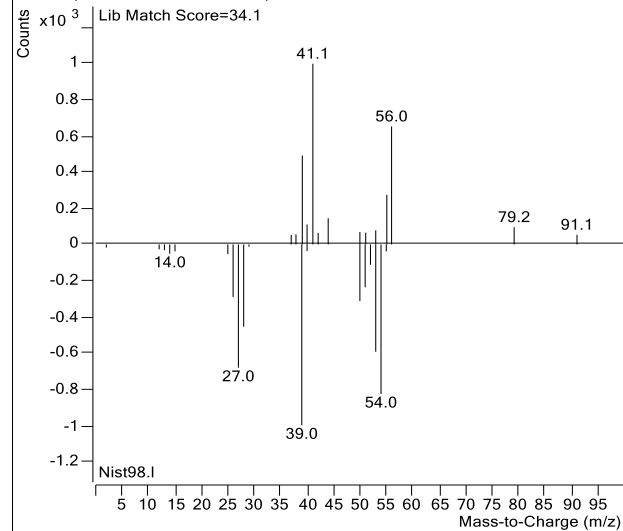
(m)=Manual Integration

## 1,3-Butadiene

+ EIC (39.0) Scan V2203801.D

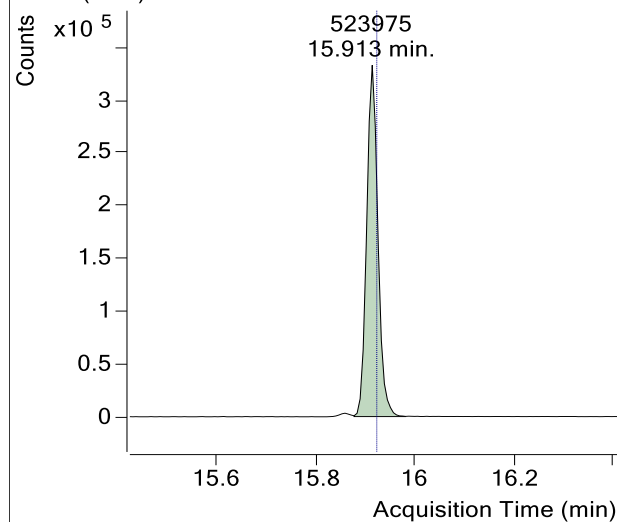


+ Scan (5.440-5.440 min, 1 scans) V2203801.D

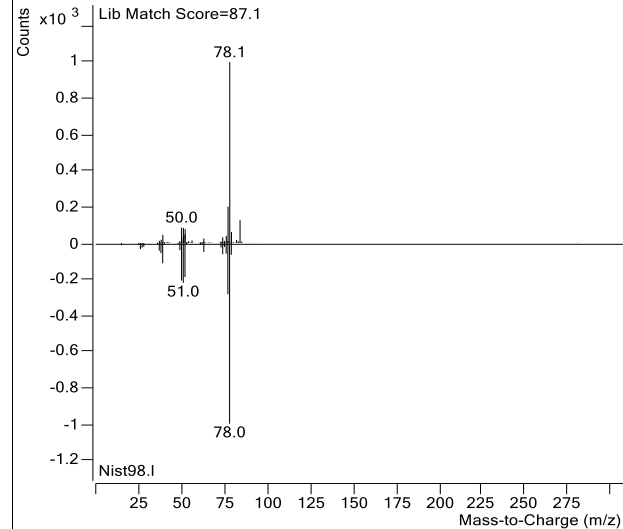


## Benzene

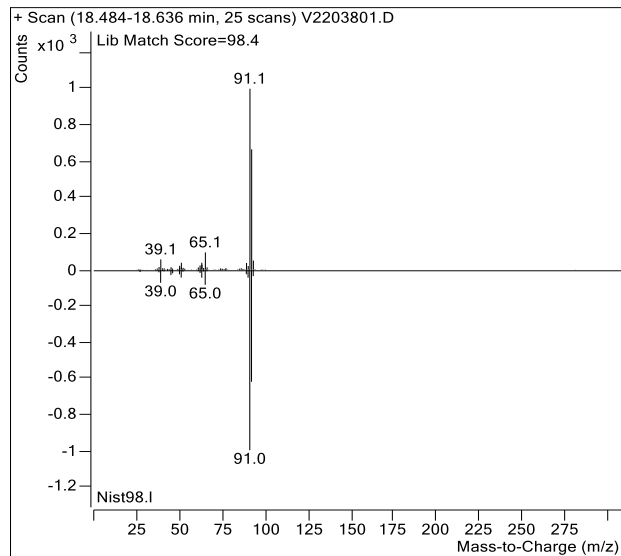
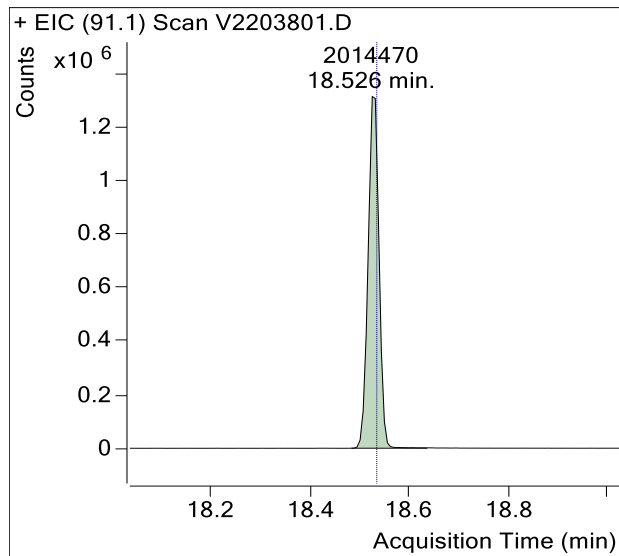
+ EIC (78.1) Scan V2203801.D



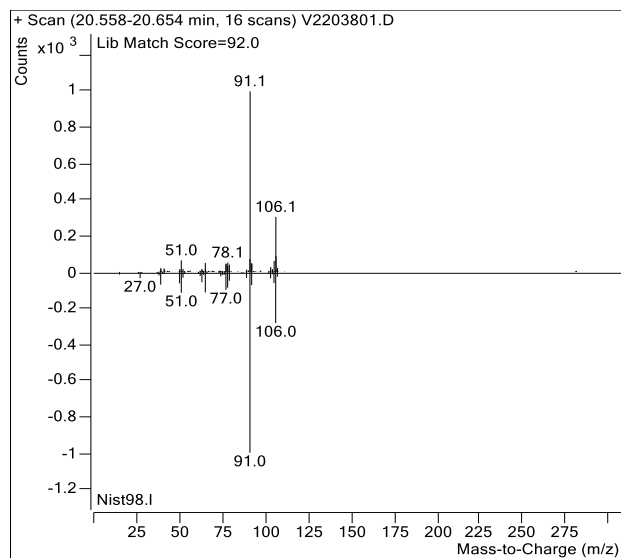
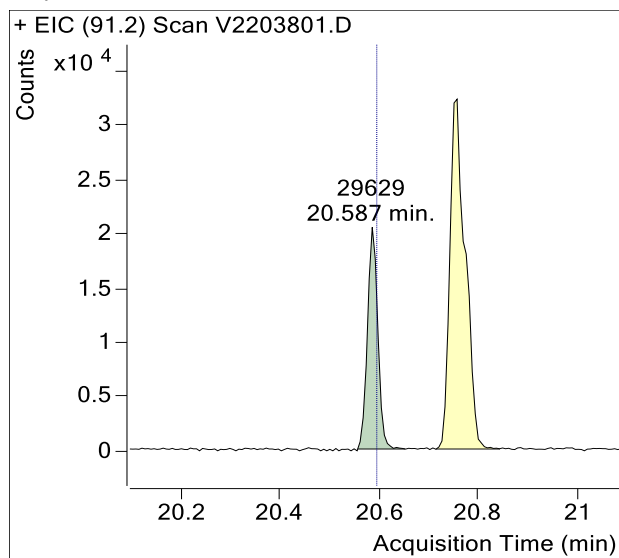
+ Scan (15.877-15.981 min, 17 scans) V2203801.D



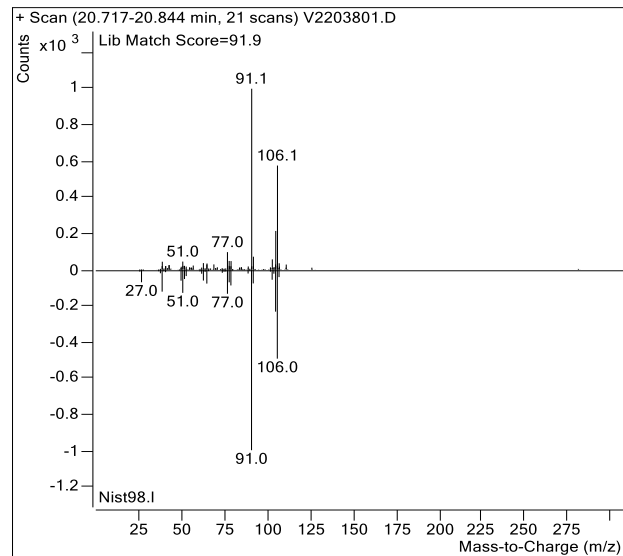
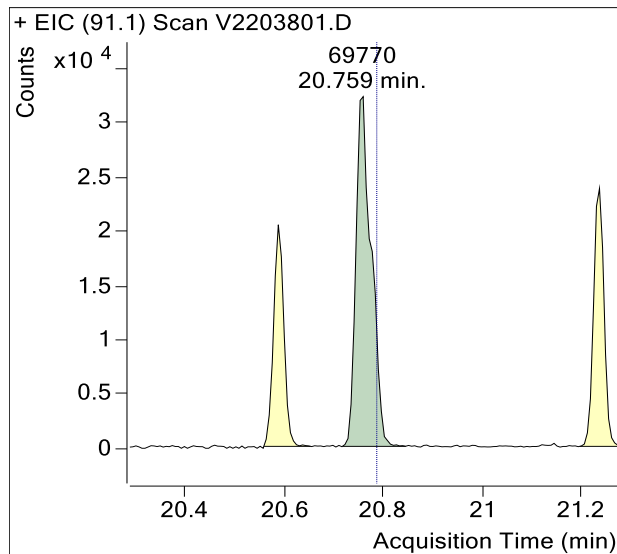
## Toluene



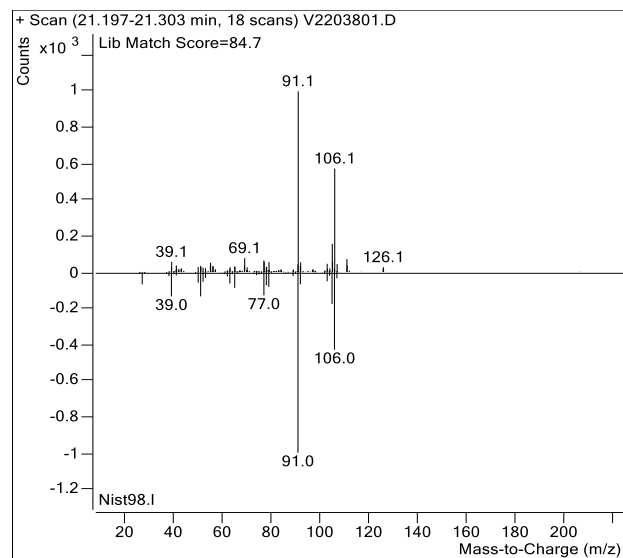
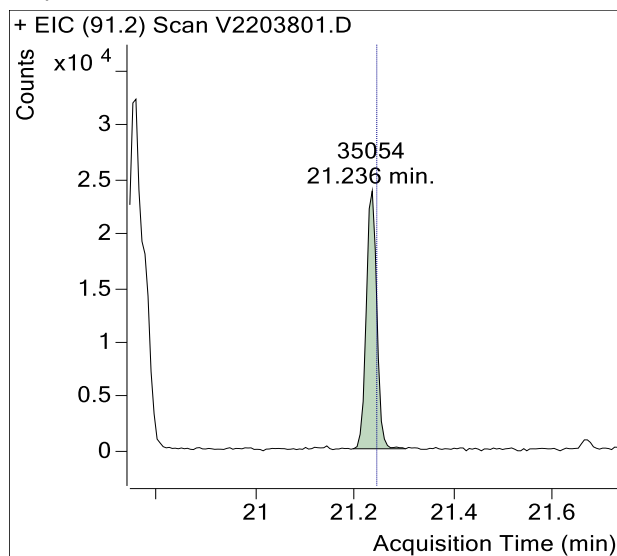
## Ethylbenzene



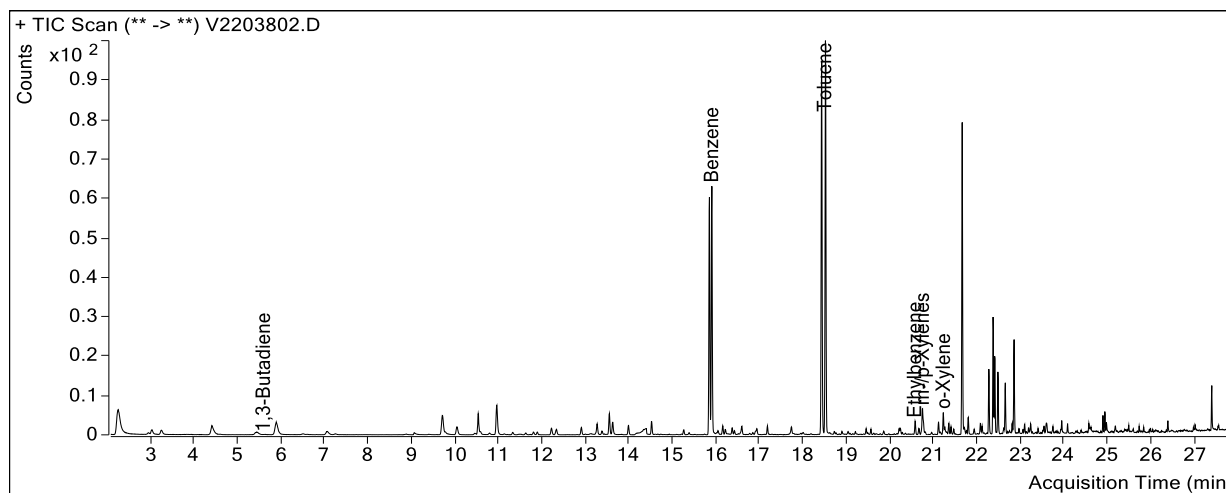
## m-/p-Xylenes



## o-Xylene



Sample Name : USSCL-PT06-S-20221219  
Sample Info : C20600  
Data File : V2203802.D  
Acquisition Date : 2023-01-16 18:44:01  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR

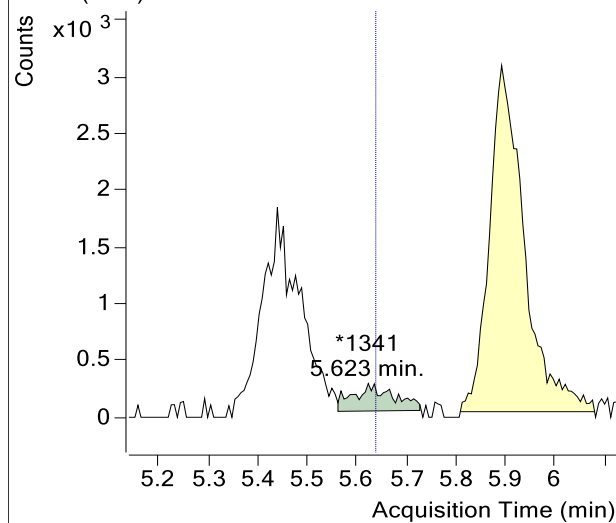


Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	1,341	m
Benzene-d6 (IS)	15.86	786,969	
Benzene	15.92	769,332	
Toluene-d8 (IS)	18.45	864,218	
Toluene	18.53	962,440	
Ethylbenzene	20.59	31,325	
m-/p-Xylenes	20.78	73,761	
o-Xylene	21.24	36,700	

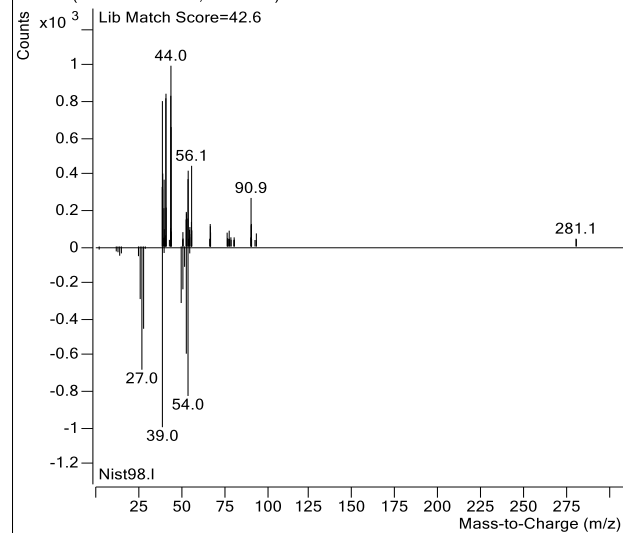
(m)=Manual Integration

## 1,3-Butadiene

+ EIC (39.0) Scan V2203802.D

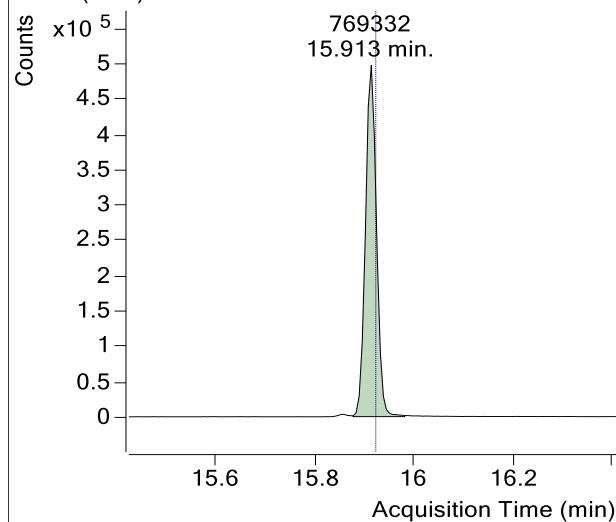


+ Scan (5.562-5.727 min, 28 scans) V2203802.D

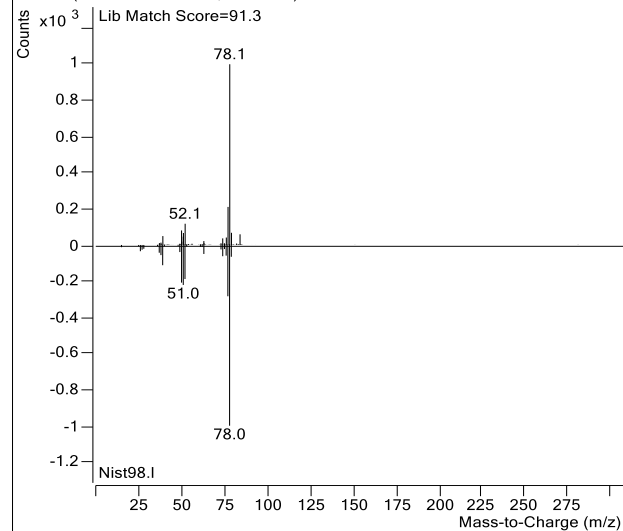


## Benzene

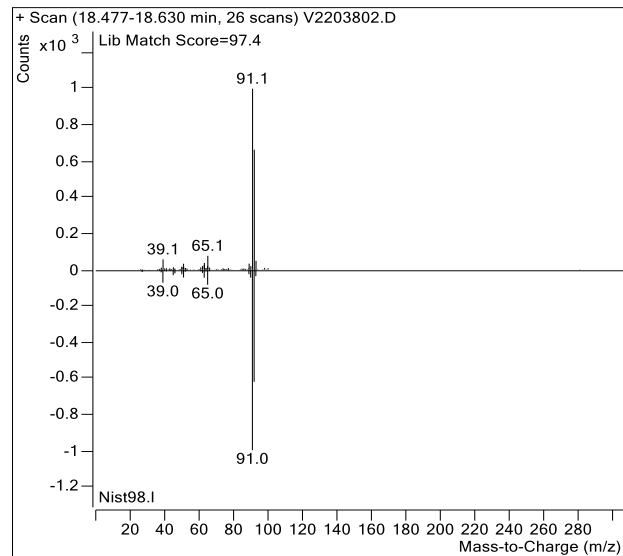
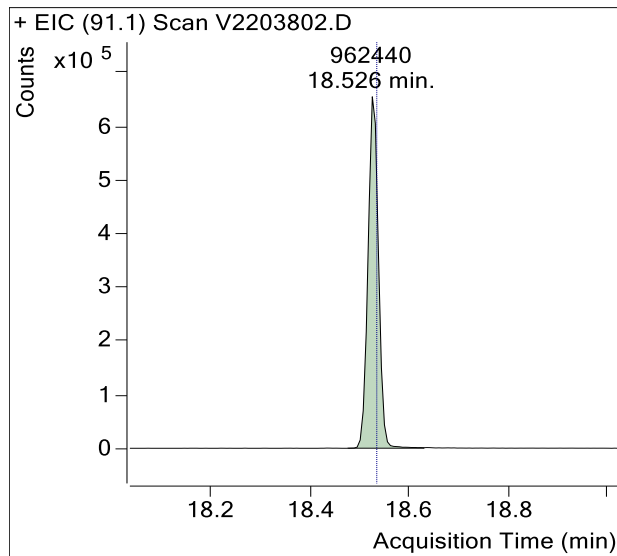
+ EIC (78.1) Scan V2203802.D



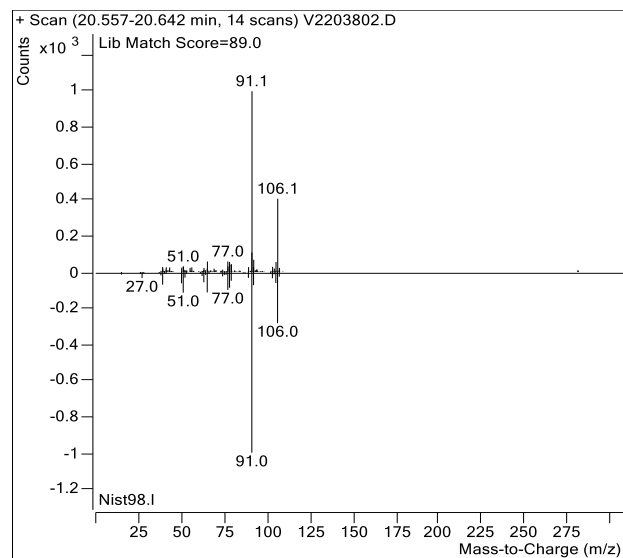
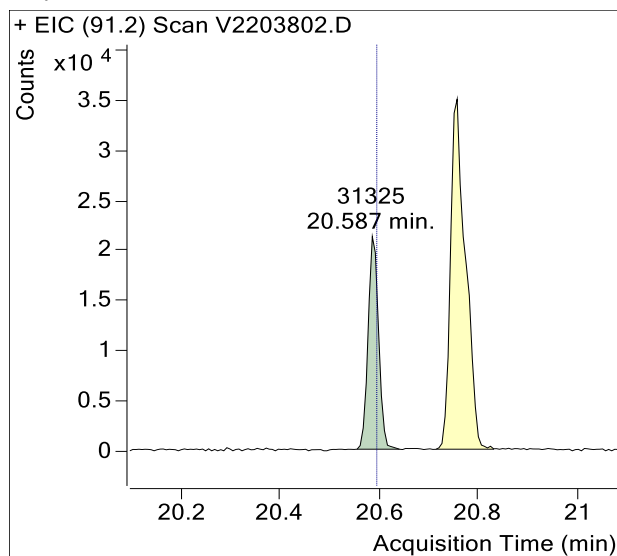
+ Scan (15.877-15.981 min, 17 scans) V2203802.D



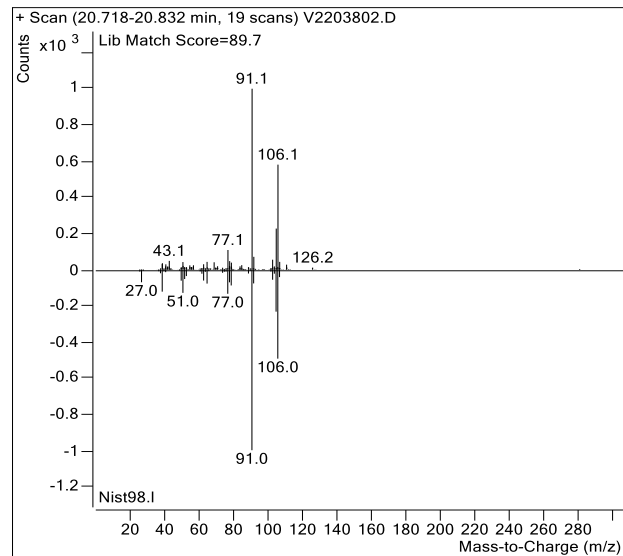
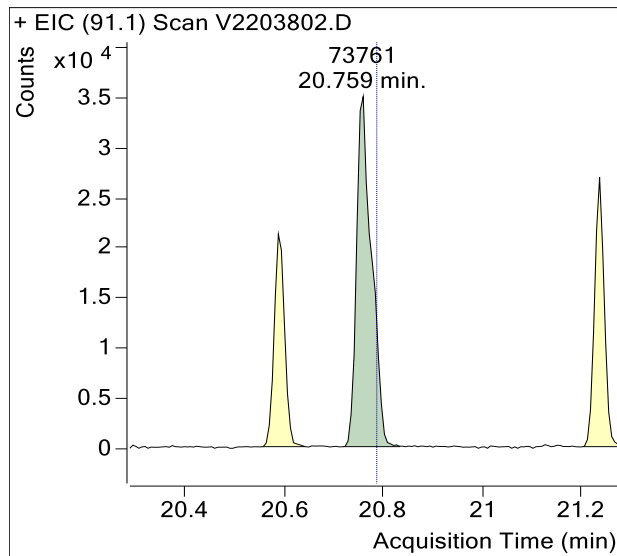
## Toluene



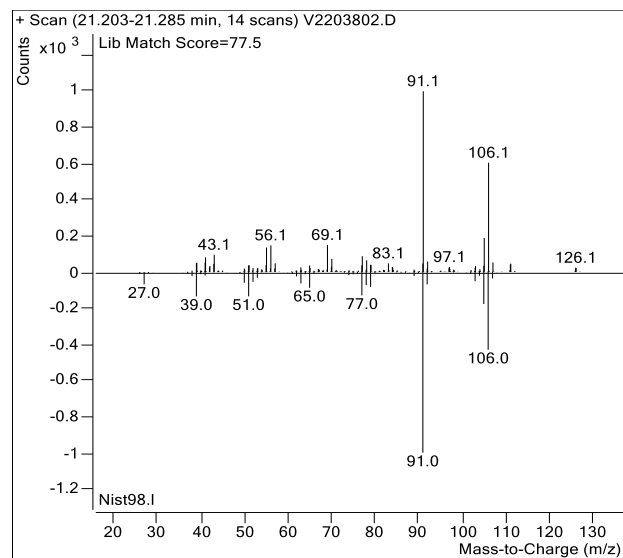
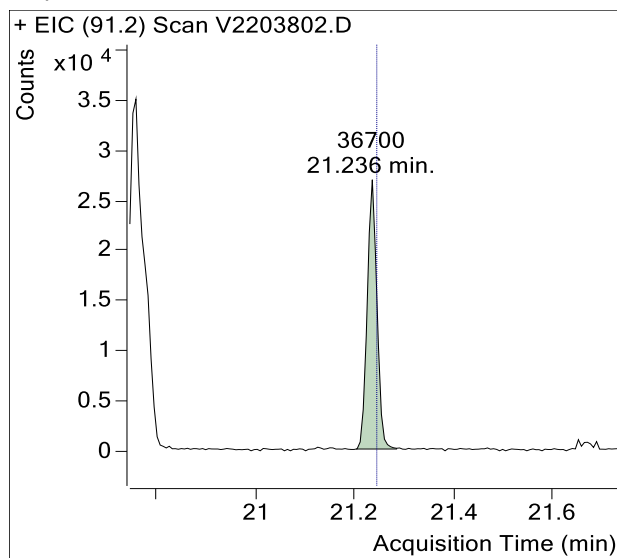
## Ethylbenzene



## m-/p-Xylenes

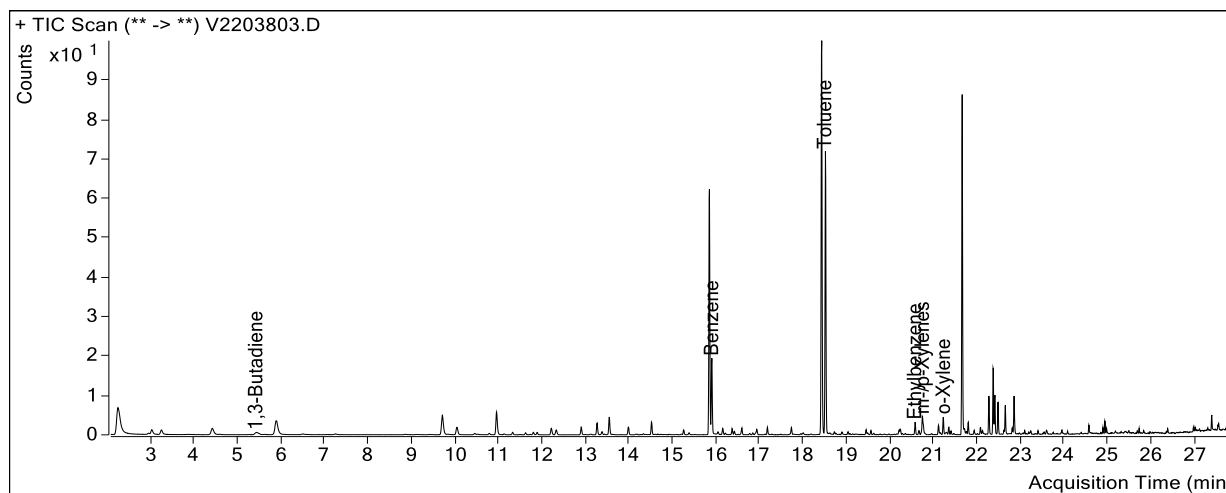


## o-Xylene





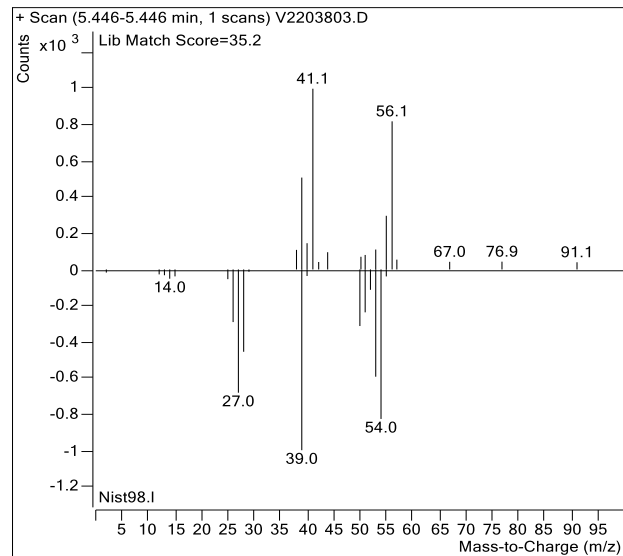
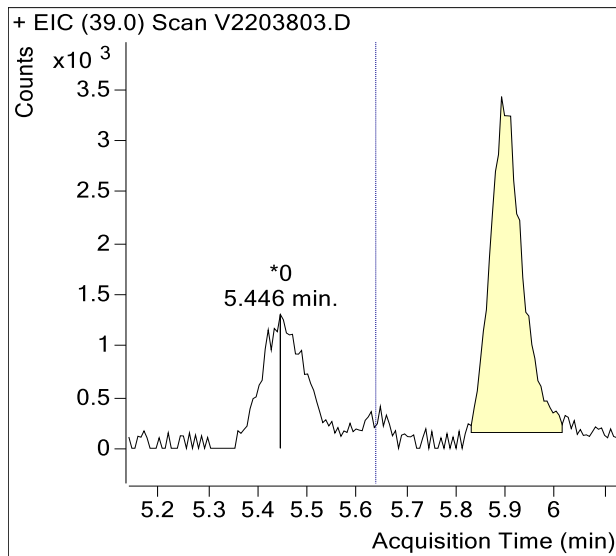
Sample Name : USSCL-PT07-S-20221219  
Sample Info : B20632  
Data File : V2203803.D  
Acquisition Date : 2023-01-16 19:25:34  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR



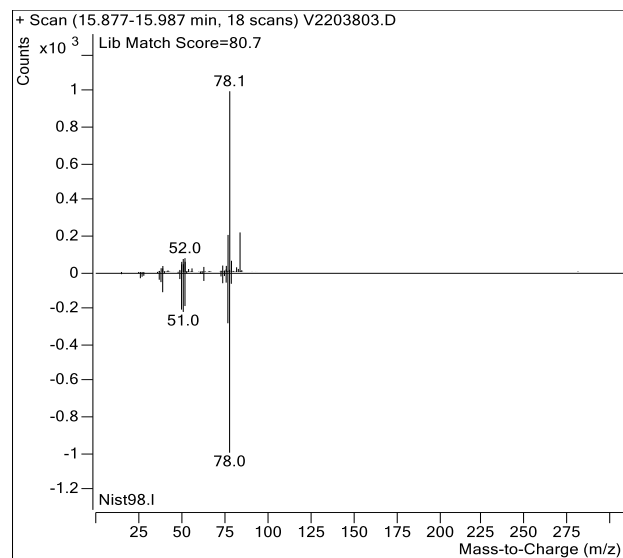
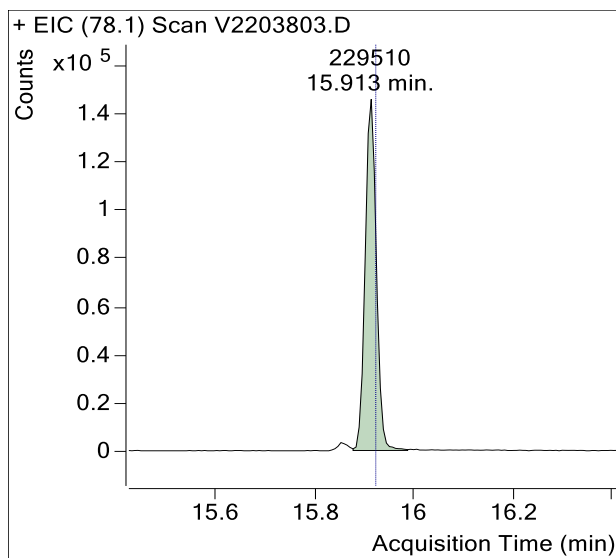
Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	0	m
Benzene-d6 (IS)	15.86	792,901	
Benzene	15.92	229,510	
Toluene-d8 (IS)	18.45	868,535	
Toluene	18.53	667,521	
Ethylbenzene	20.59	28,486	
m-/p-Xylenes	20.78	49,373	
o-Xylene	21.24	27,980	

(m)=Manual Integration

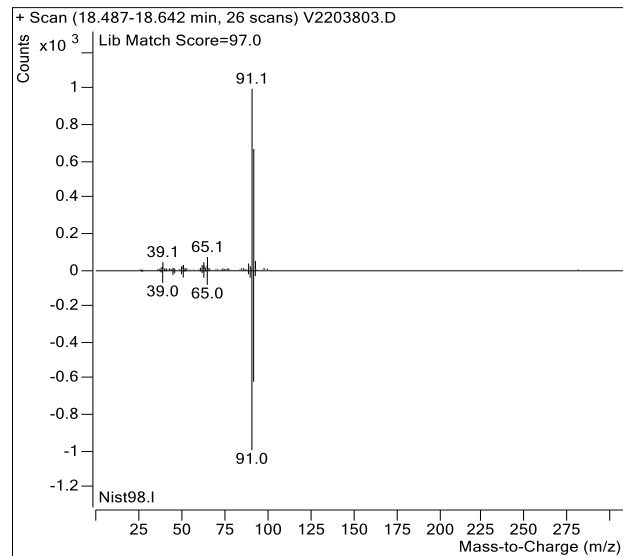
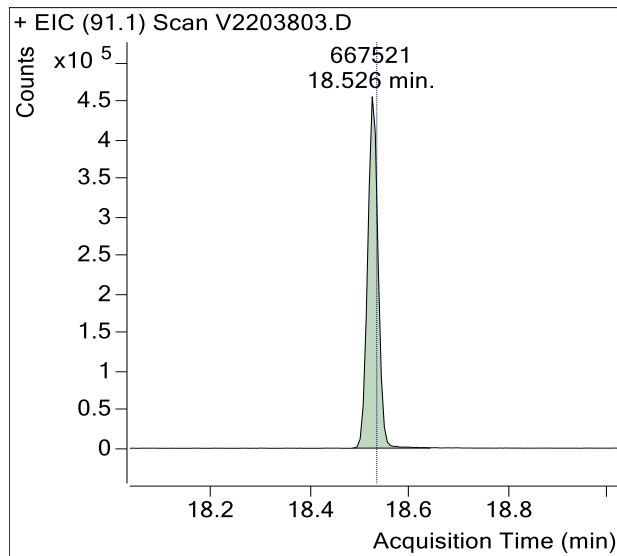
## 1,3-Butadiene



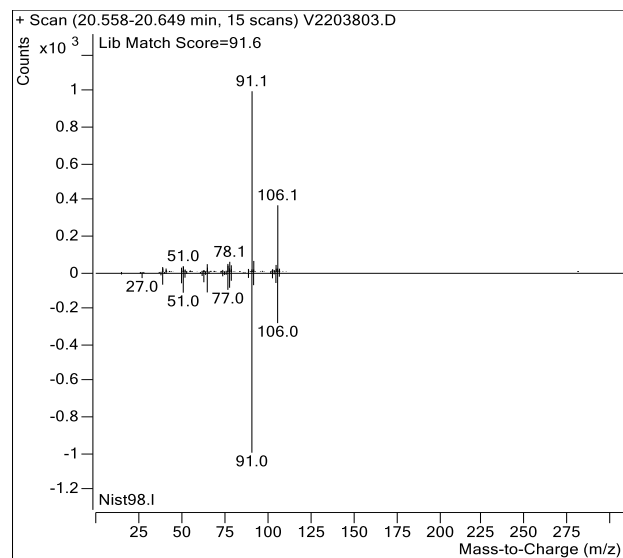
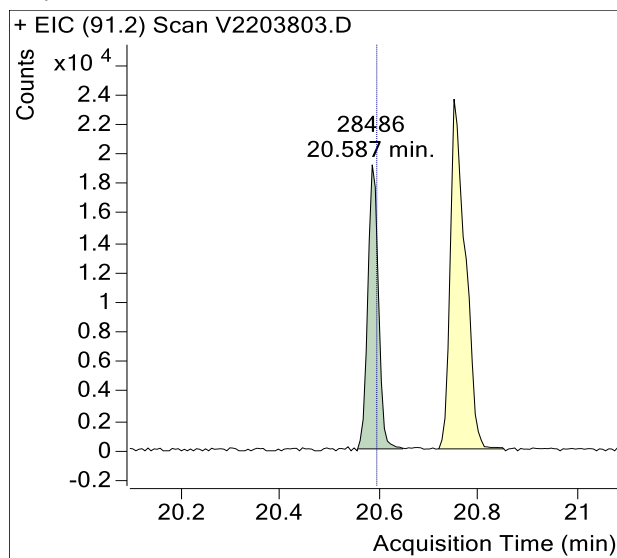
## Benzene



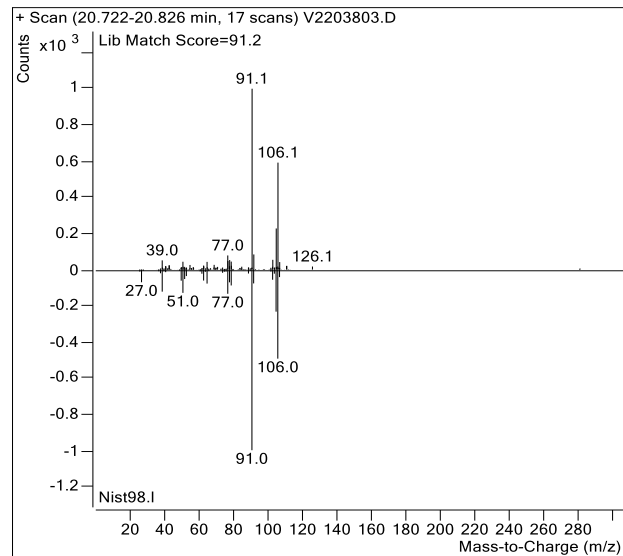
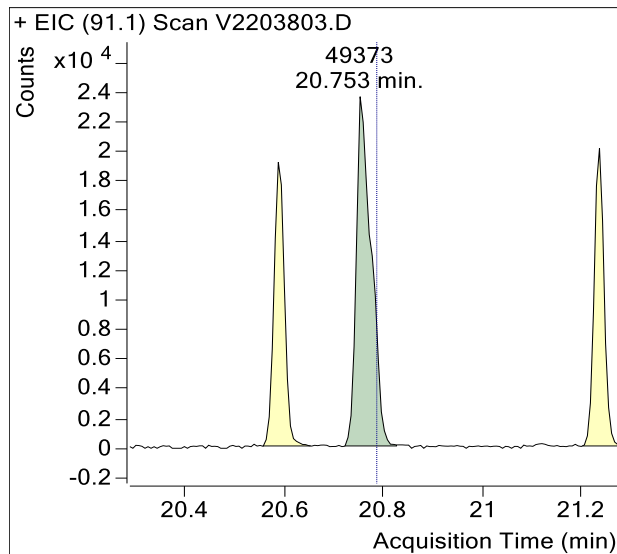
## Toluene



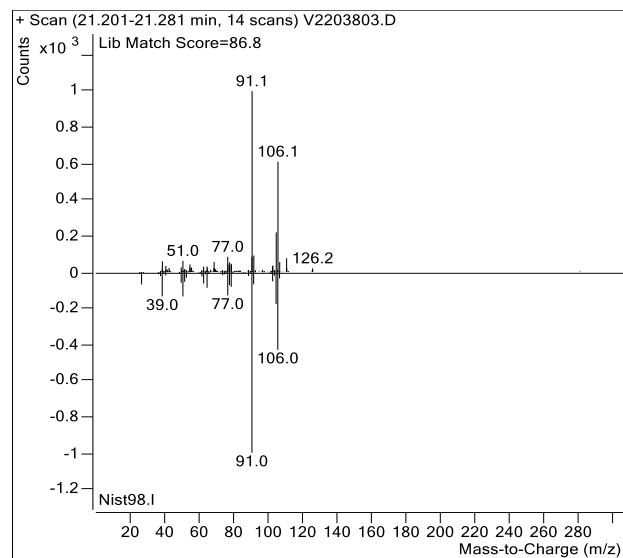
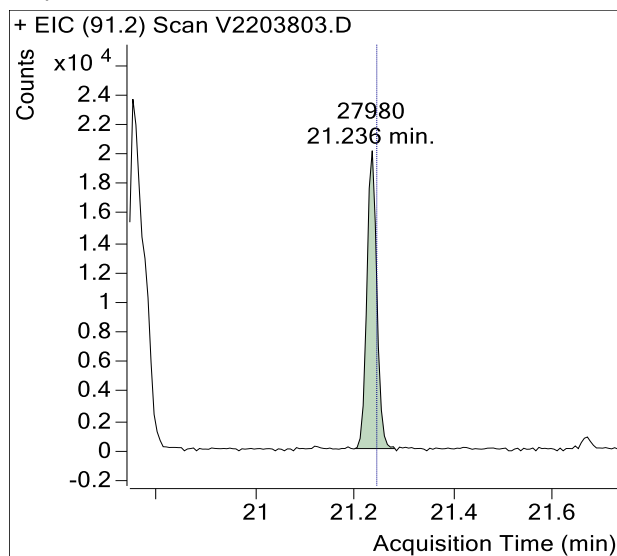
## Ethylbenzene



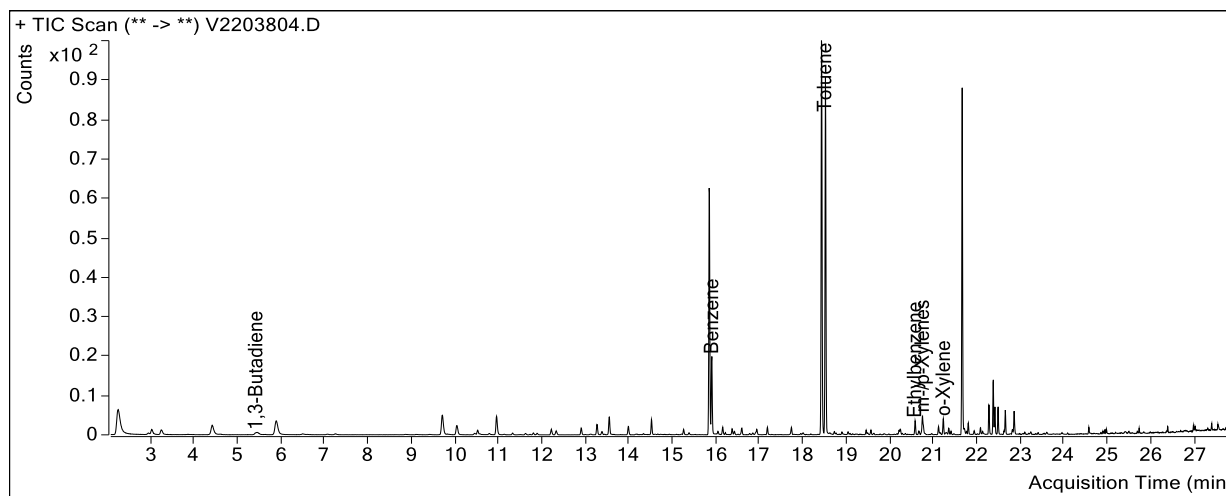
## m-/p-Xylenes



## o-Xylene



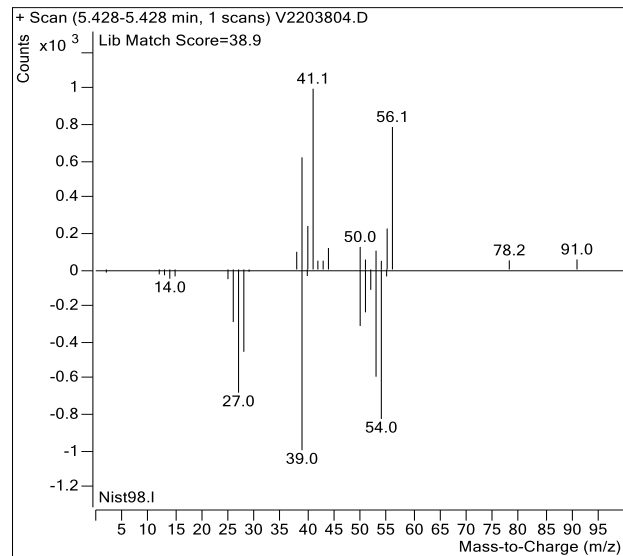
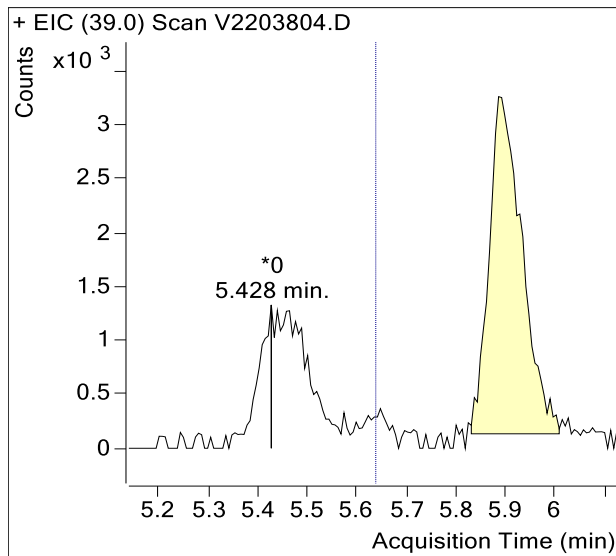
Sample Name : USSCL-PT08-S-20221219  
Sample Info : B43632  
Data File : V2203804.D  
Acquisition Date : 2023-01-16 20:06:54  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR



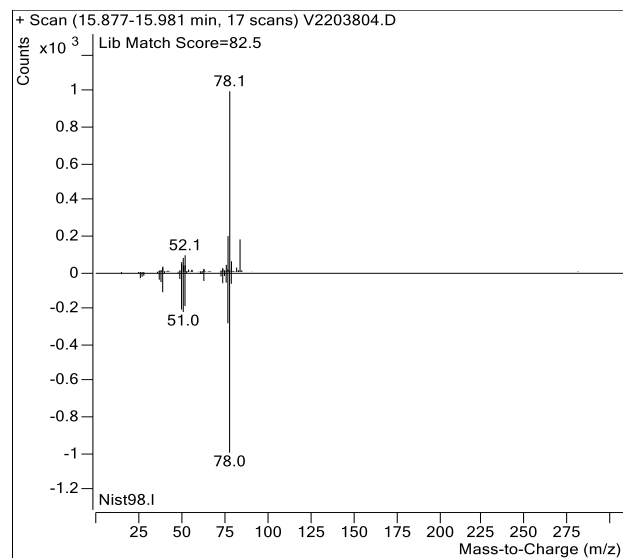
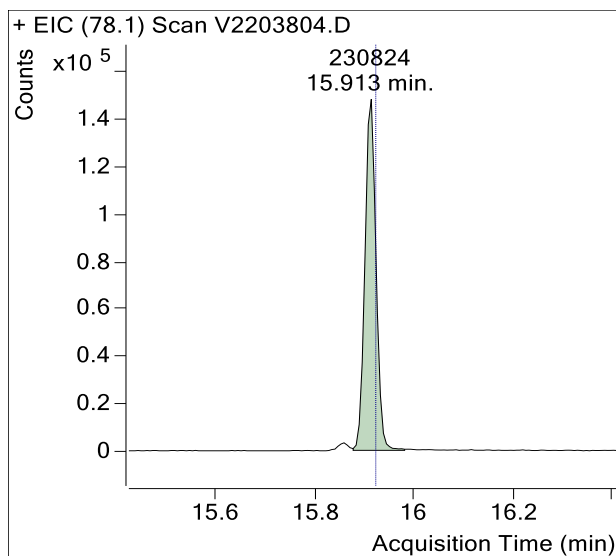
Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	0	m
Benzene-d6 (IS)	15.86	796,693	
Benzene	15.92	230,824	
Toluene-d8 (IS)	18.45	875,886	
Toluene	18.53	826,805	
Ethylbenzene	20.59	33,100	
m-/p-Xylenes	20.78	47,805	
o-Xylene	21.24	26,526	

(m)=Manual Integration

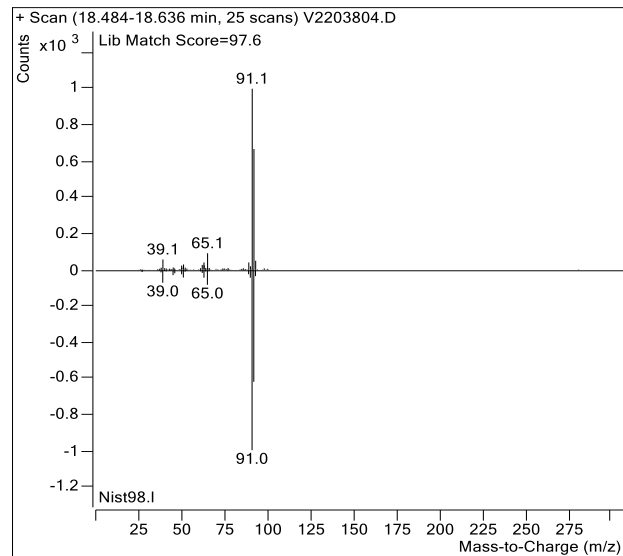
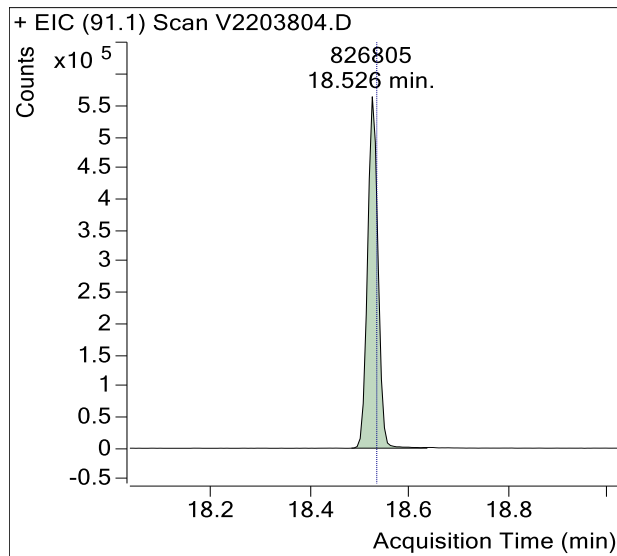
## 1,3-Butadiene



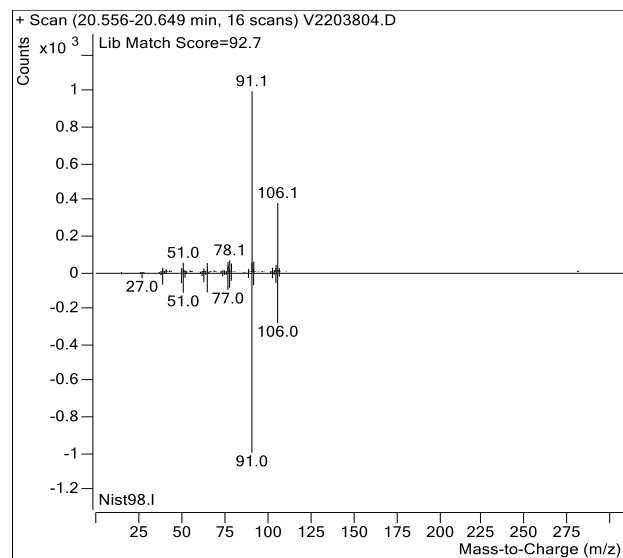
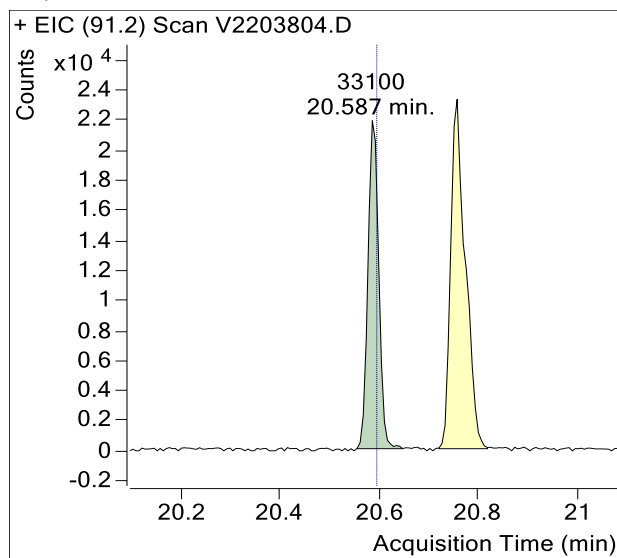
## Benzene



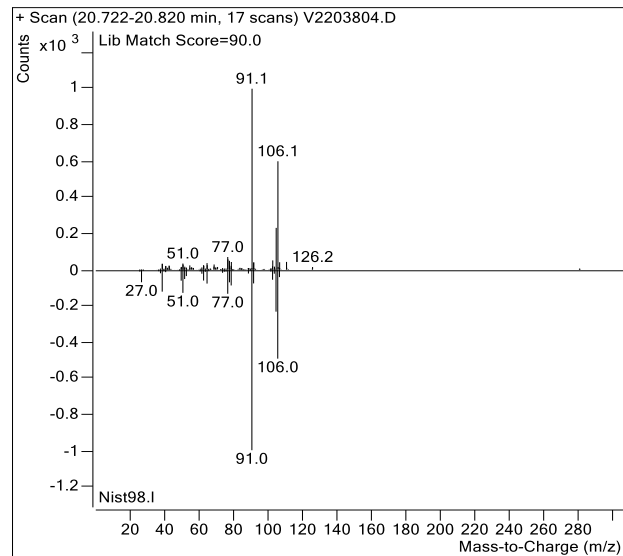
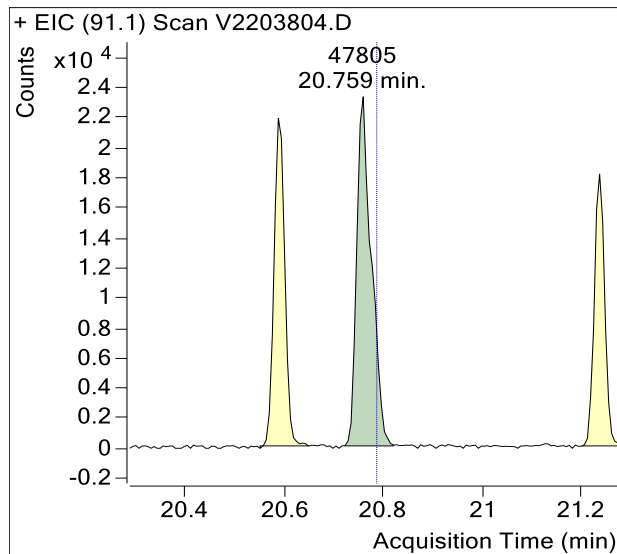
## Toluene



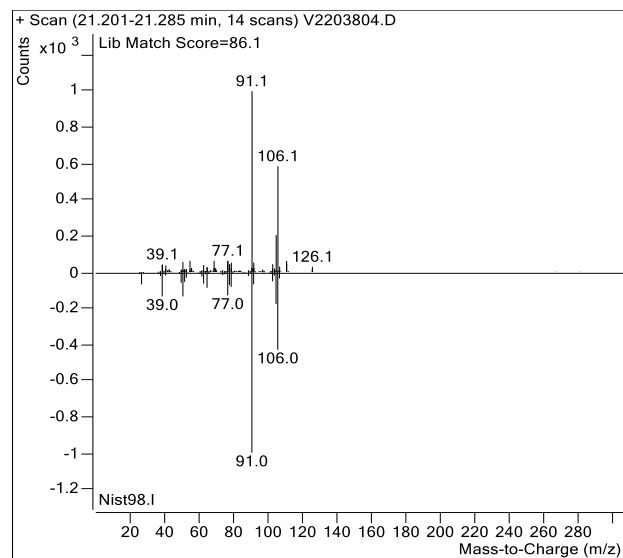
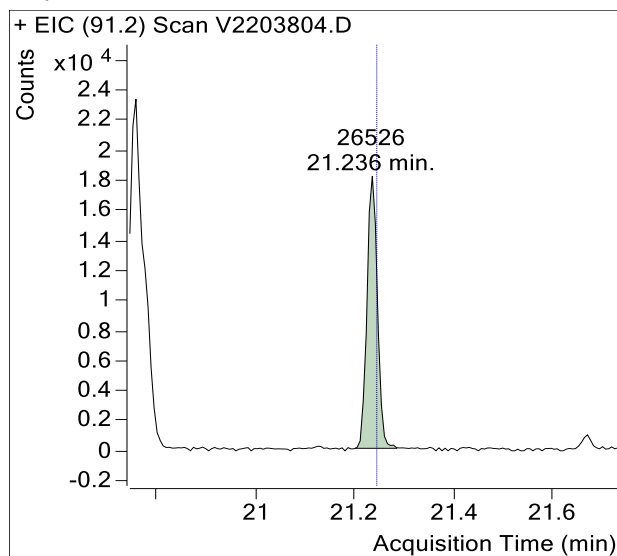
## Ethylbenzene



## m-/p-Xylenes

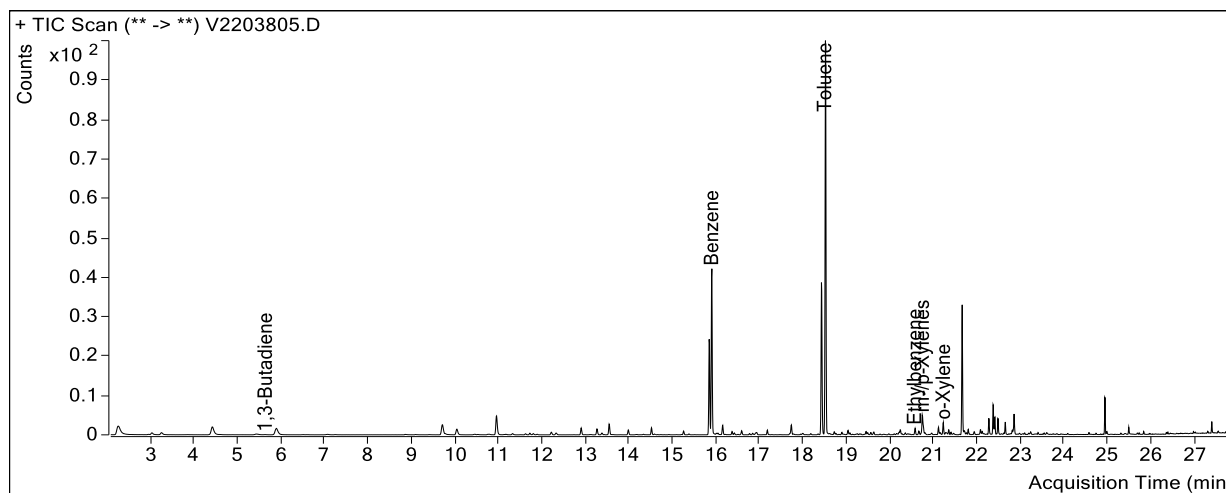


## o-Xylene





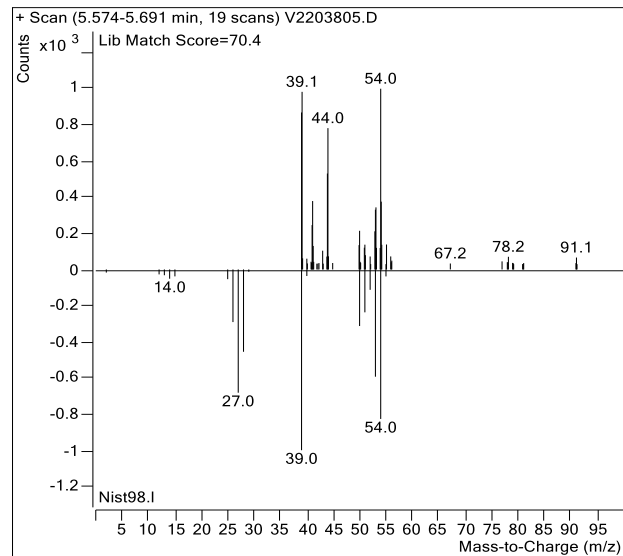
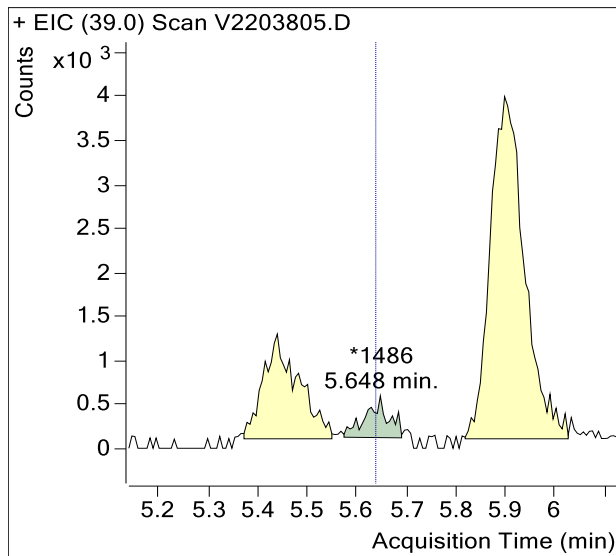
Sample Name : USSCL-PT09-S-20221219  
Sample Info : B18572  
Data File : V2203805.D  
Acquisition Date : 2023-01-16 20:48:01  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR



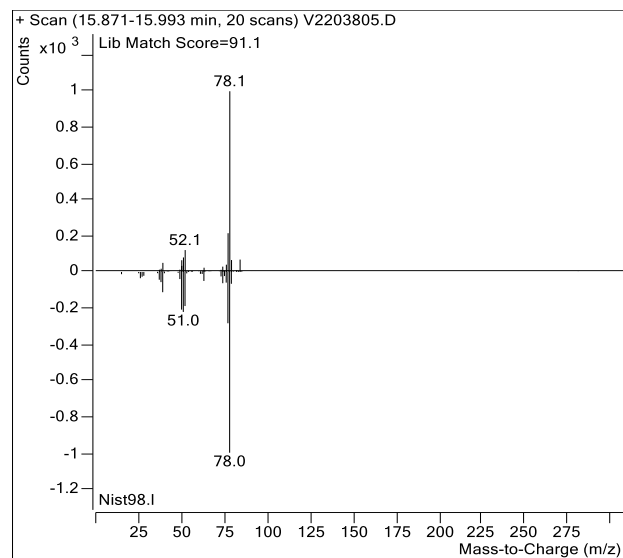
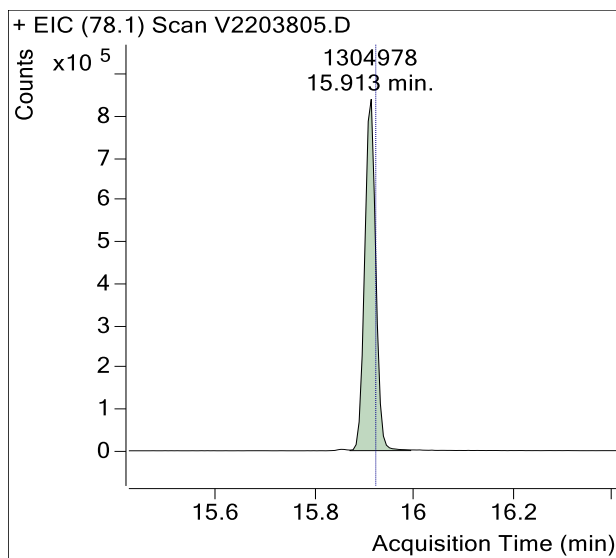
Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	1,486	m
Benzene-d6 (IS)	15.86	796,961	
Benzene	15.92	1,304,978	
Toluene-d8 (IS)	18.45	876,894	
Toluene	18.53	2,444,694	
Ethylbenzene	20.59	37,020	
m-/p-Xylenes	20.78	131,895	
o-Xylene	21.24	53,490	

(m)=Manual Integration

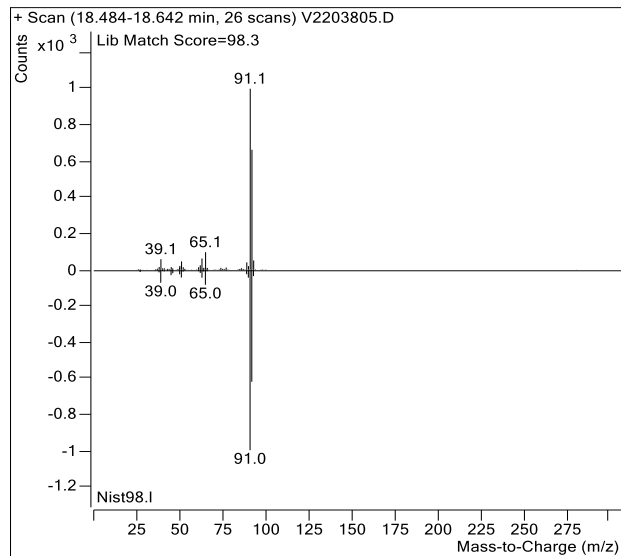
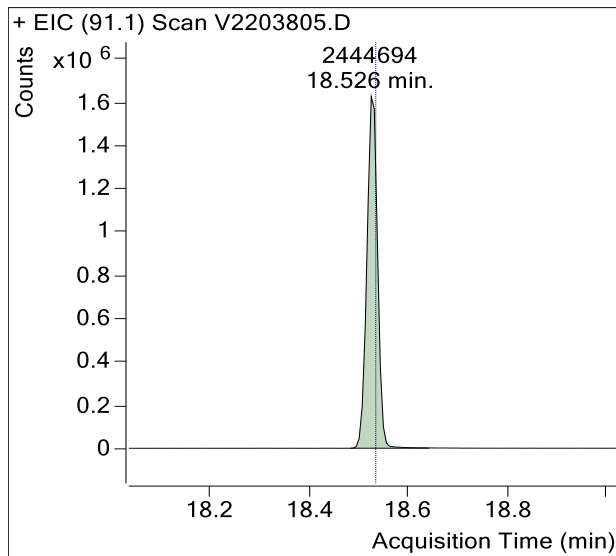
## 1,3-Butadiene



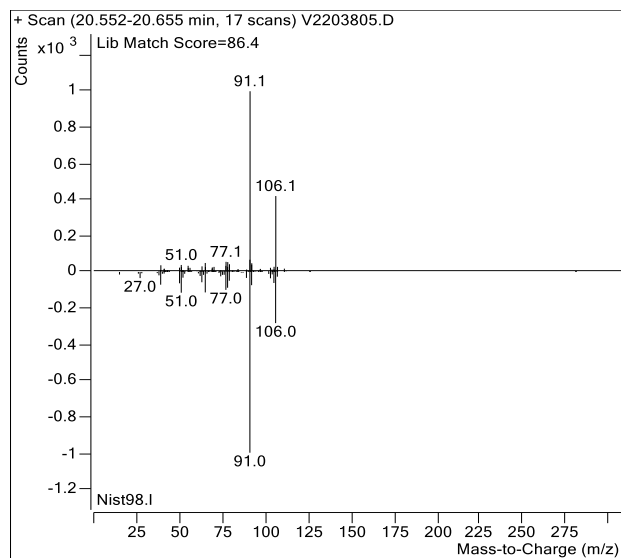
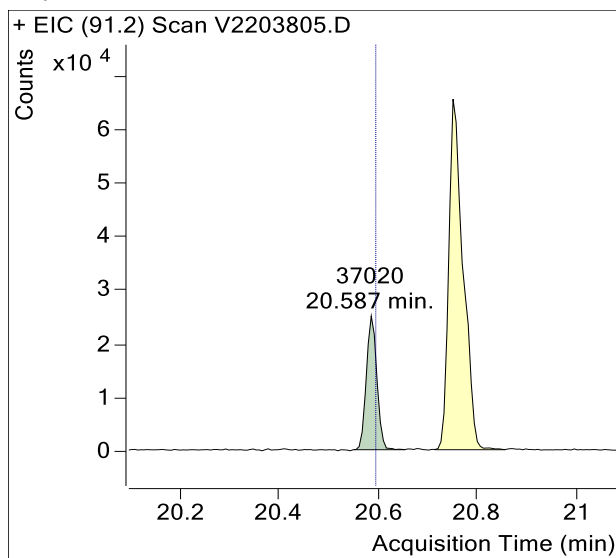
## Benzene



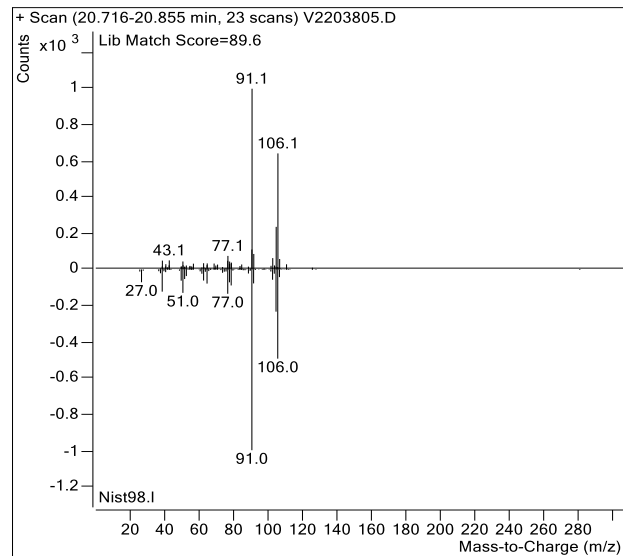
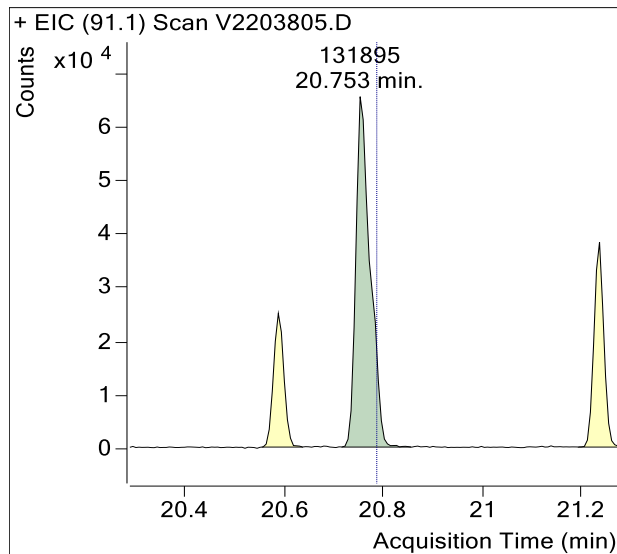
## Toluene



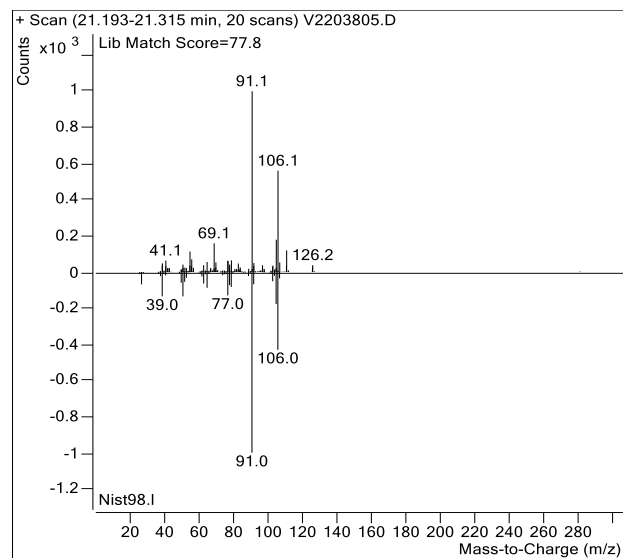
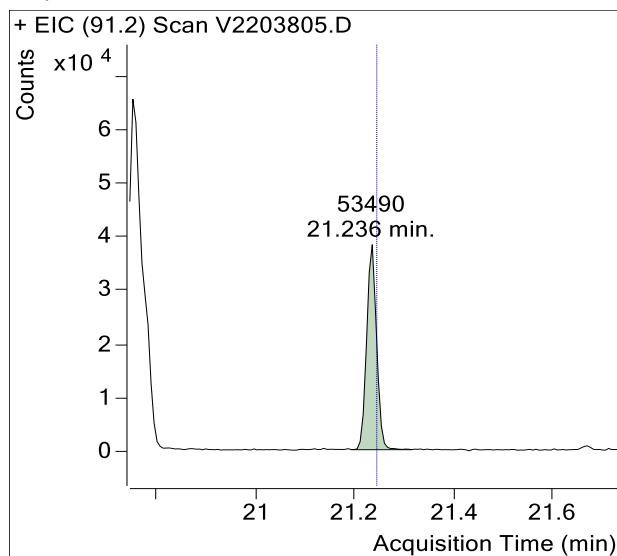
## Ethylbenzene



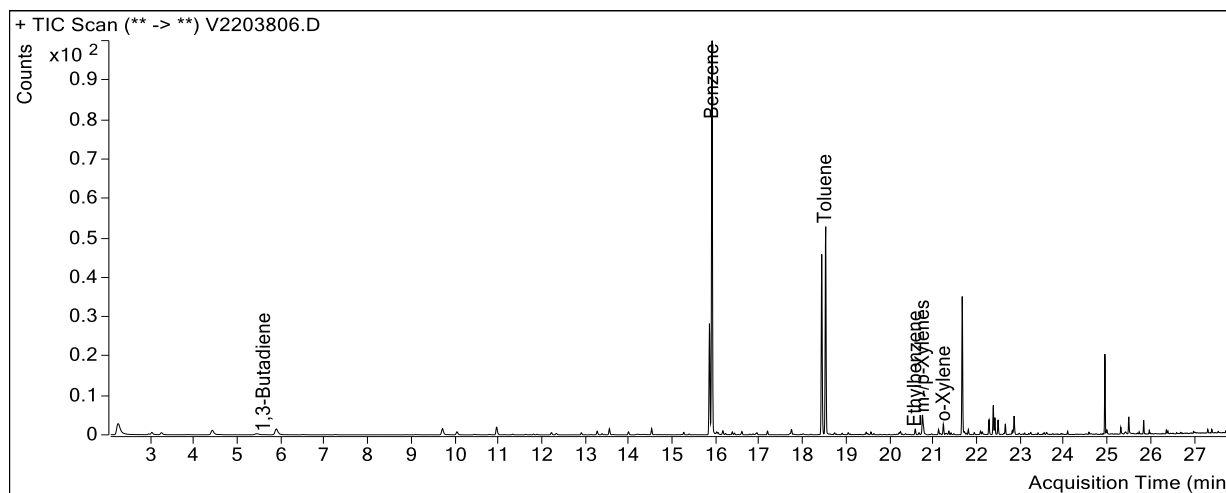
## m-/p-Xylenes



## o-Xylene



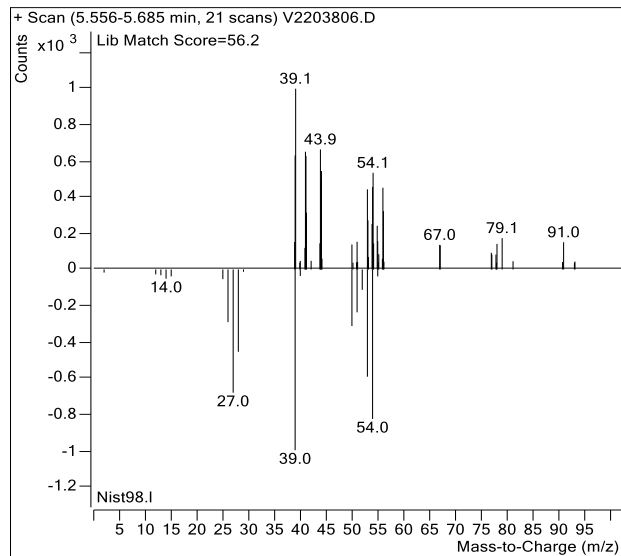
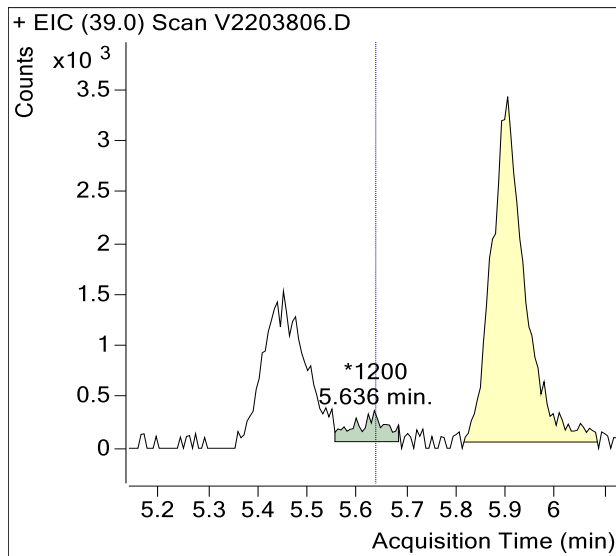
Sample Name : USSCL-PT10-S-20221219  
Sample Info : C01384  
Data File : V2203806.D  
Acquisition Date : 2023-01-16 21:28:54  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR



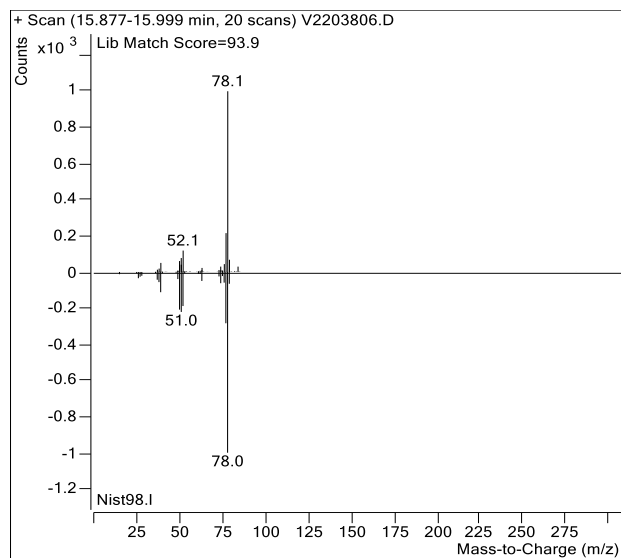
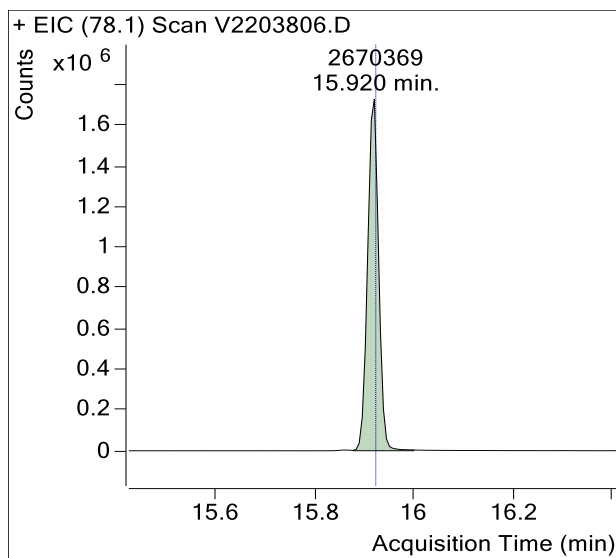
Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	1,200	m
Benzene-d6 (IS)	15.86	802,368	
Benzene	15.92	2,670,369	
Toluene-d8 (IS)	18.45	878,561	
Toluene	18.53	1,108,525	
Ethylbenzene	20.59	32,193	
m-/p-Xylenes	20.78	118,659	
o-Xylene	21.24	43,107	

(m)=Manual Integration

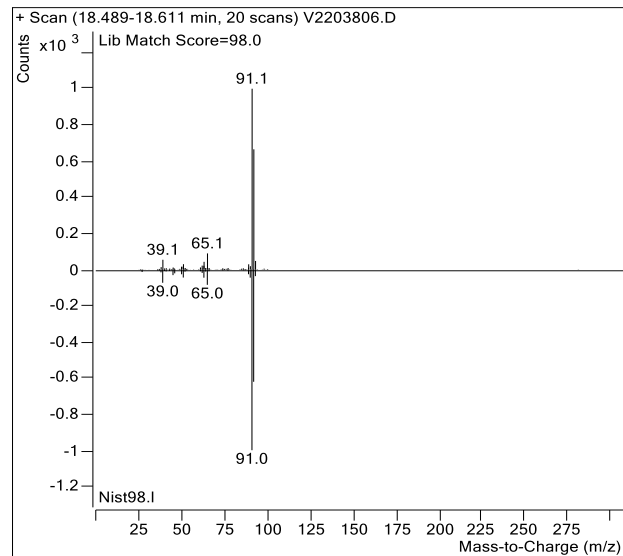
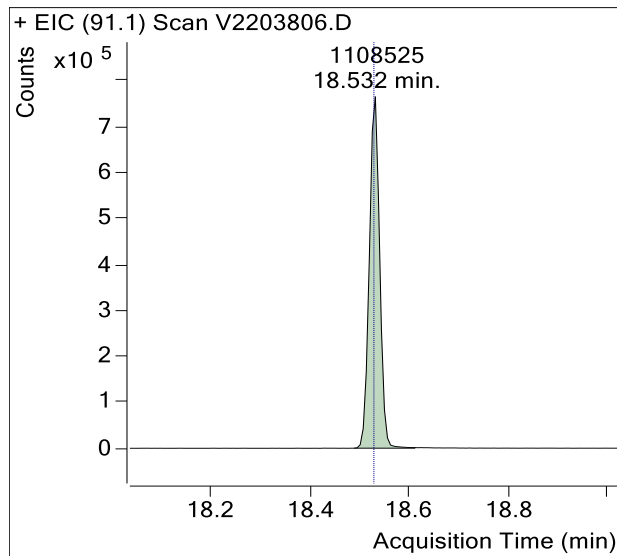
## 1,3-Butadiene



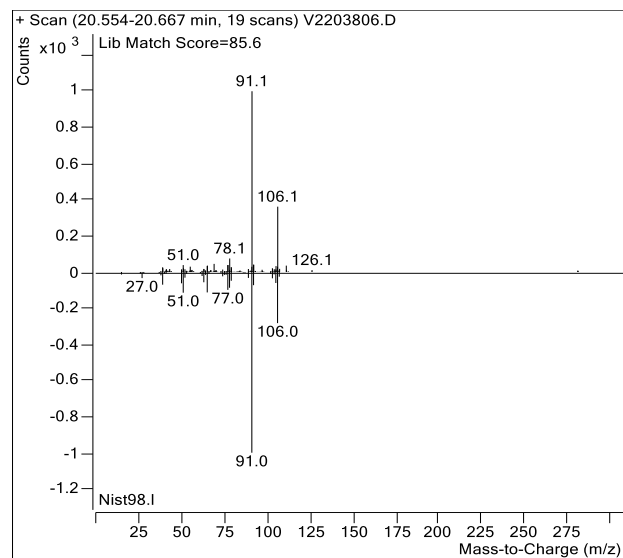
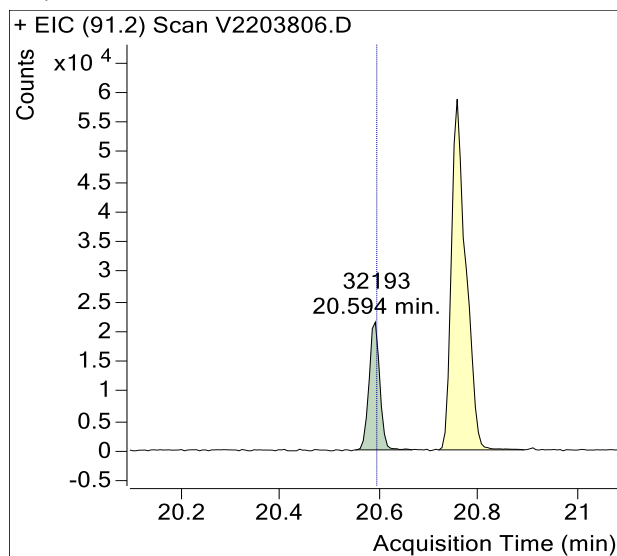
## Benzene



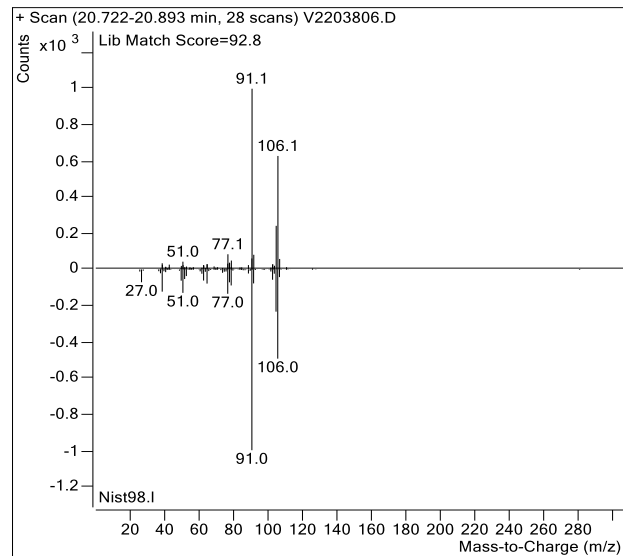
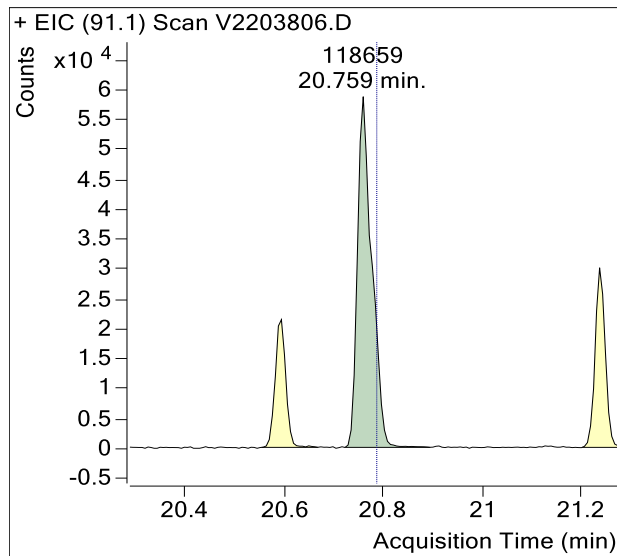
## Toluene



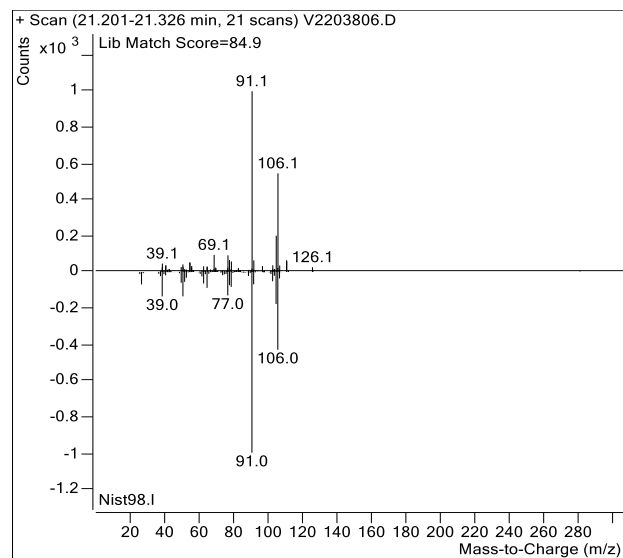
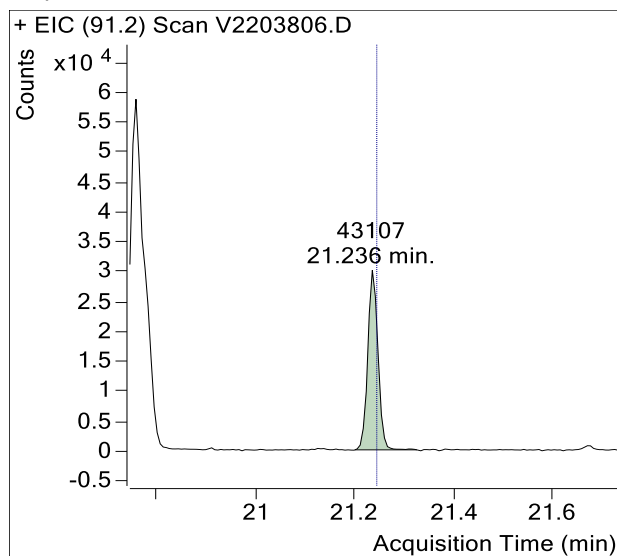
## Ethylbenzene



## m-/p-Xylenes

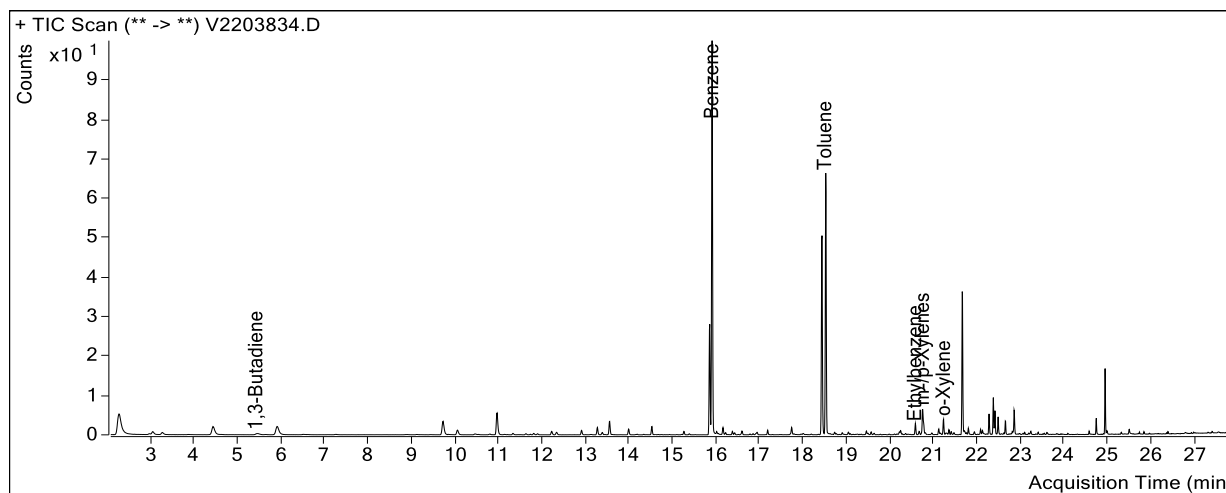


## o-Xylene





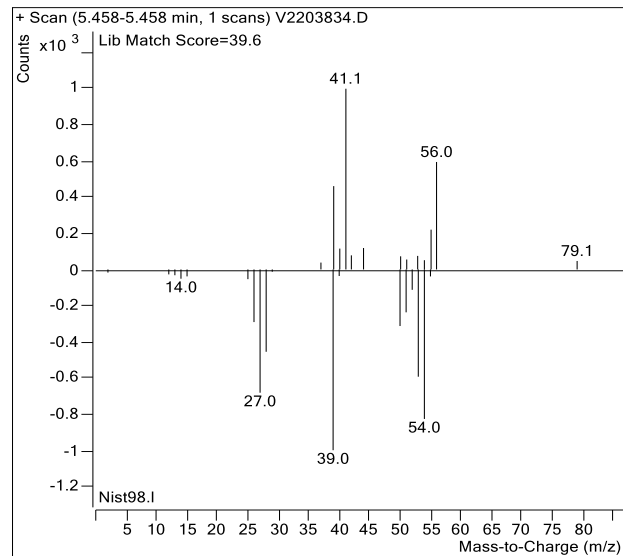
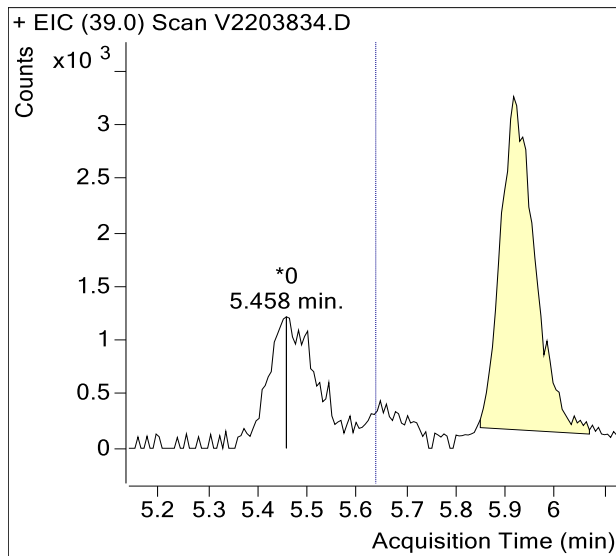
Sample Name : USSCL-PT10-D-20221219  
Sample Info : B27351; Recollect  
Data File : V2203834.D  
Acquisition Date : 2023-01-17 19:30:46  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR



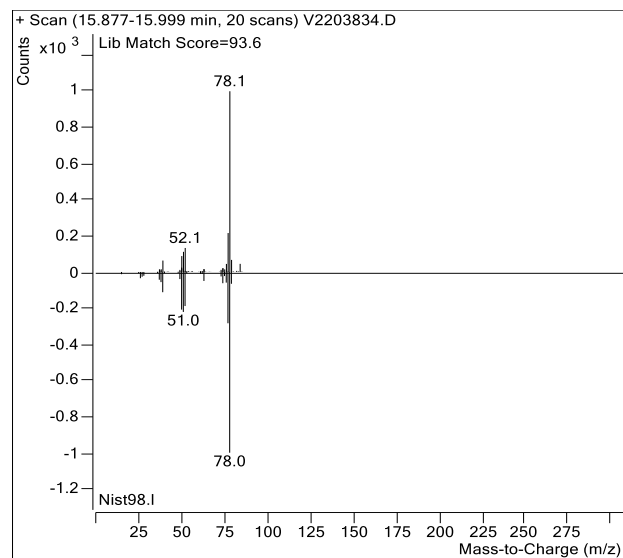
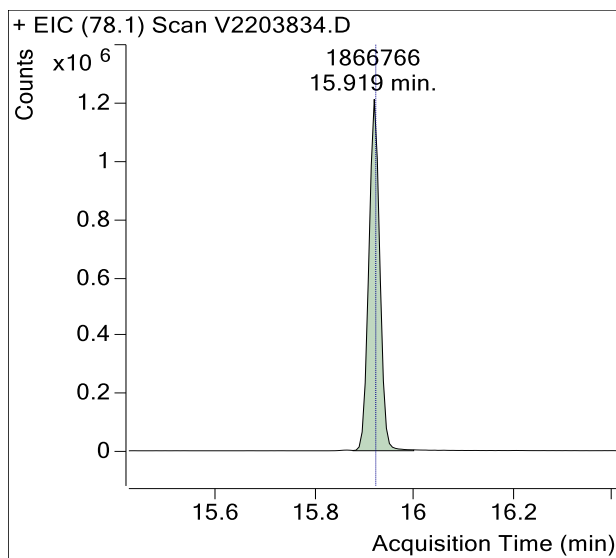
Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	0	m
Benzene-d6 (IS)	15.86	568,789	
Benzene	15.92	1,866,766	
Toluene-d8 (IS)	18.45	741,725	
Toluene	18.53	1,046,964	
Ethylbenzene	20.59	43,414	
m-/p-Xylenes	20.78	111,474	
o-Xylene	21.24	46,659	

(m)=Manual Integration

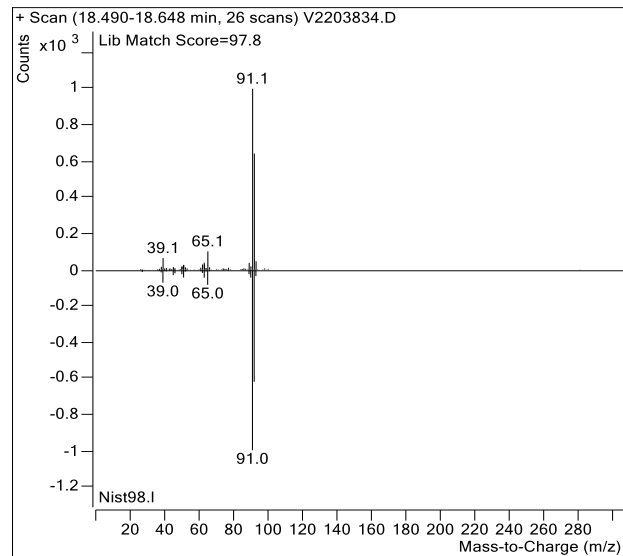
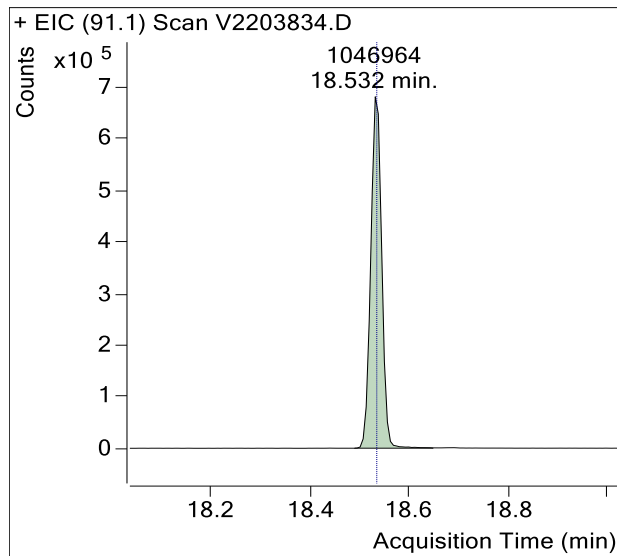
## 1,3-Butadiene



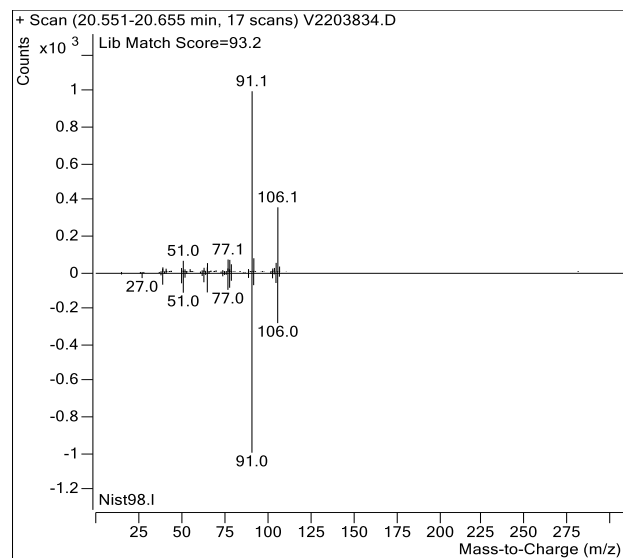
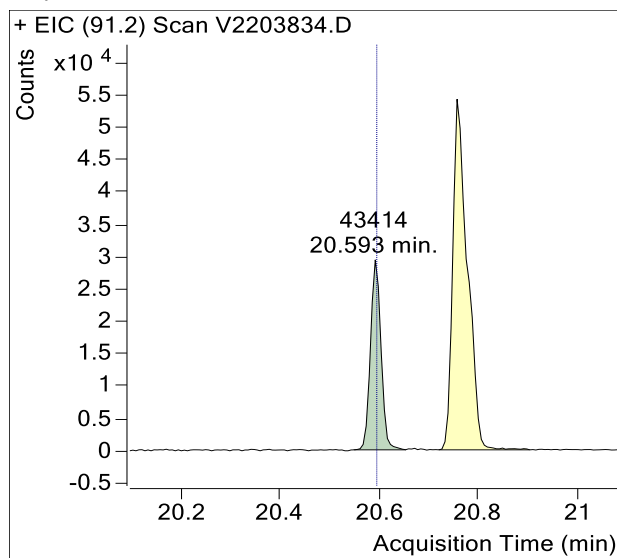
## Benzene



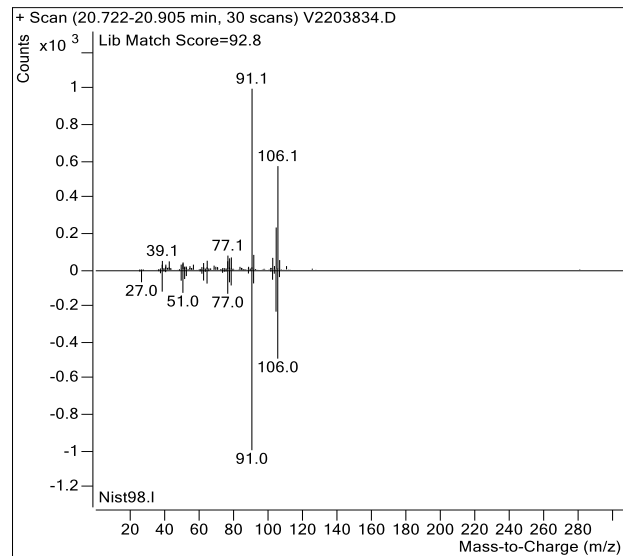
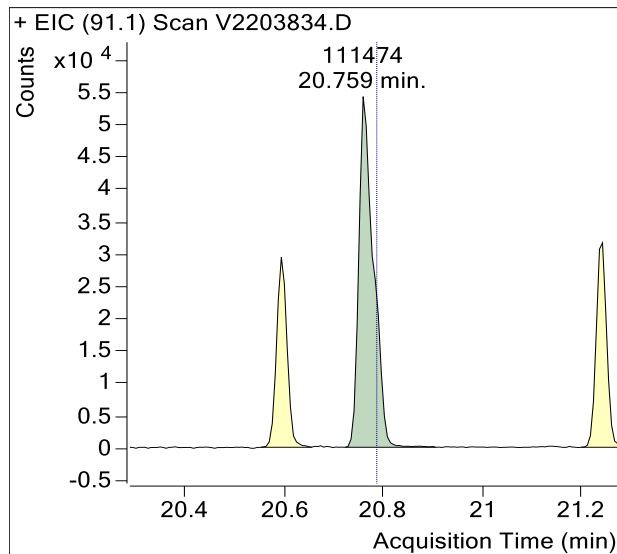
## Toluene



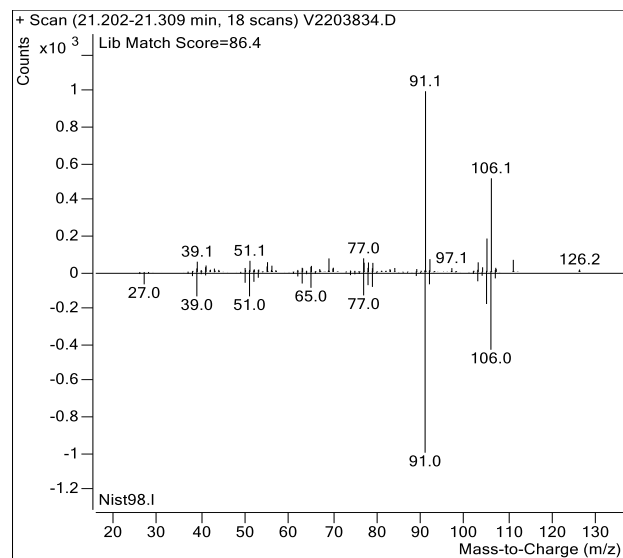
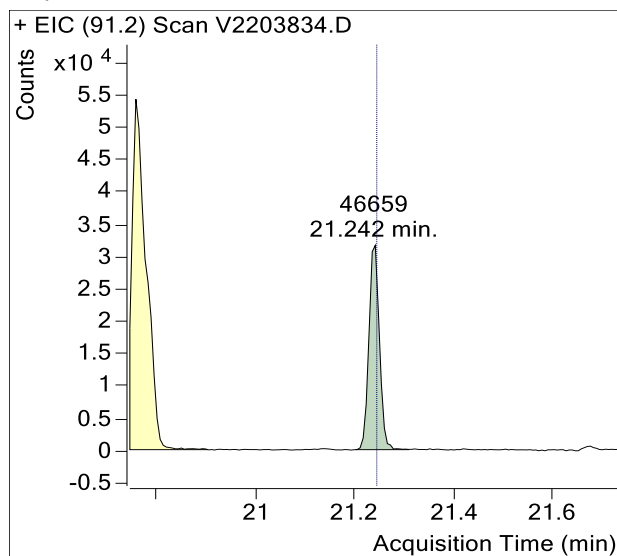
## Ethylbenzene



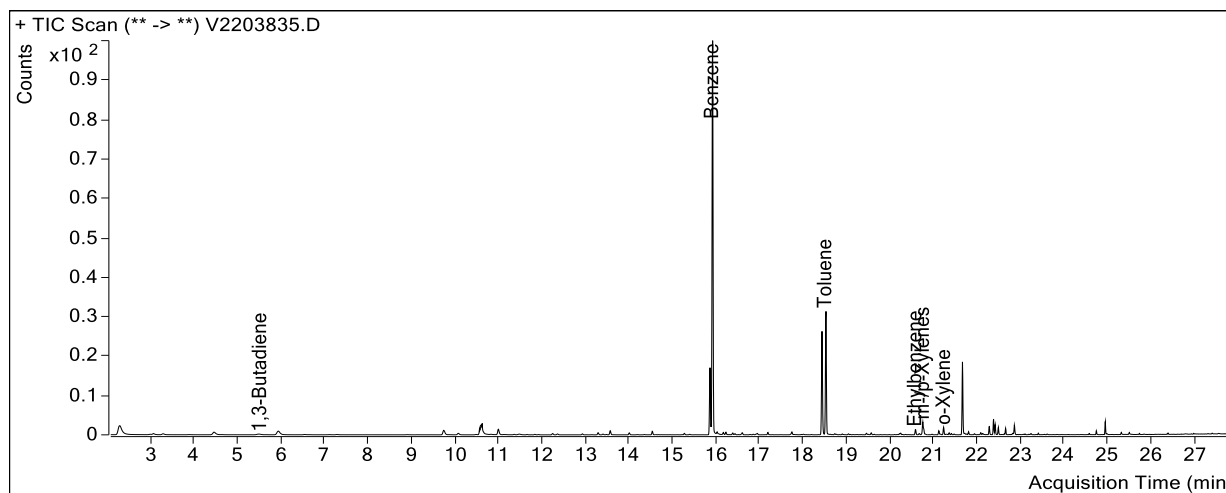
## m-/p-Xylenes



## o-Xylene



Sample Name : USSCL-PT11-S-20221219  
Sample Info : B40408; Recollect  
Data File : V2203835.D  
Acquisition Date : 2023-01-17 20:10:08  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR

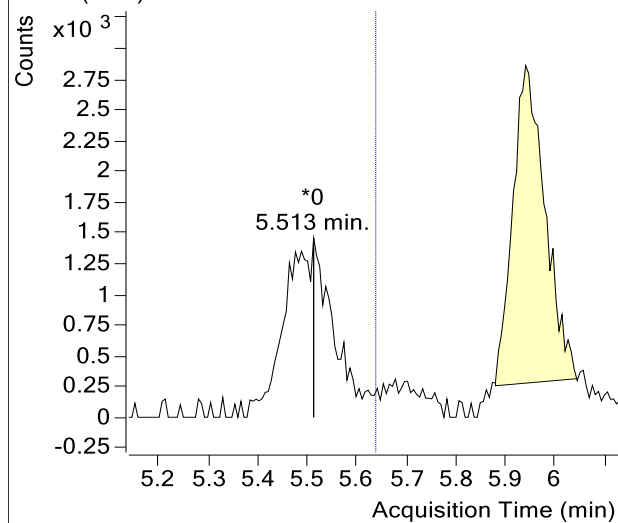


Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	0	m
Benzene-d6 (IS)	15.86	700,778	
Benzene	15.92	3,937,068	
Toluene-d8 (IS)	18.45	736,983	
Toluene	18.53	968,773	
Ethylbenzene	20.59	42,754	
m-/p-Xylenes	20.78	110,151	
o-Xylene	21.24	44,433	

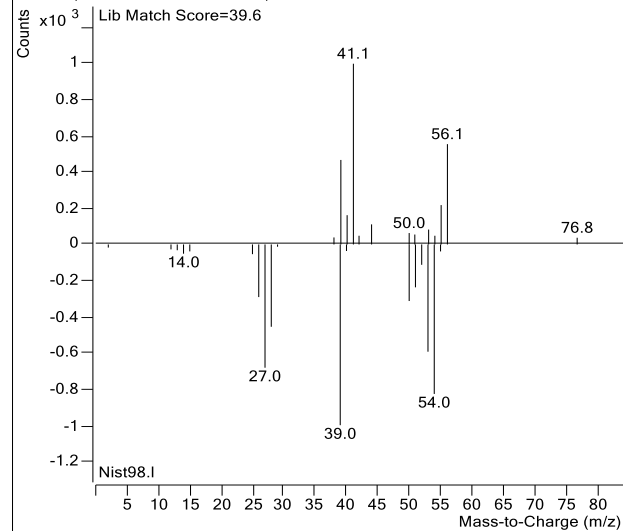
(m)=Manual Integration

## 1,3-Butadiene

+ EIC (39.0) Scan V2203835.D

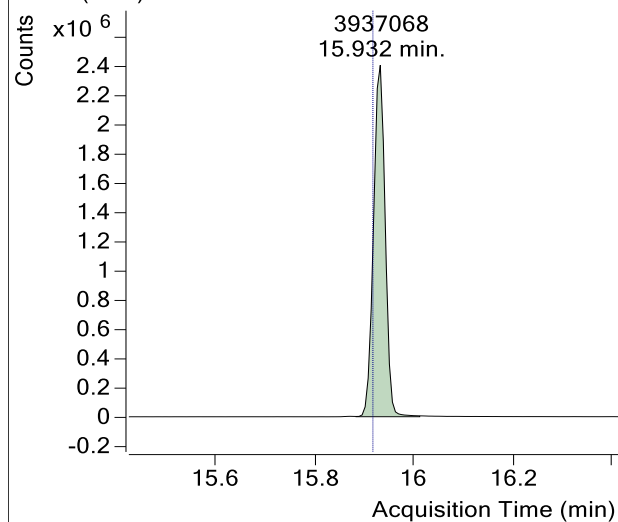


+ Scan (5.513-5.513 min, 1 scans) V2203835.D

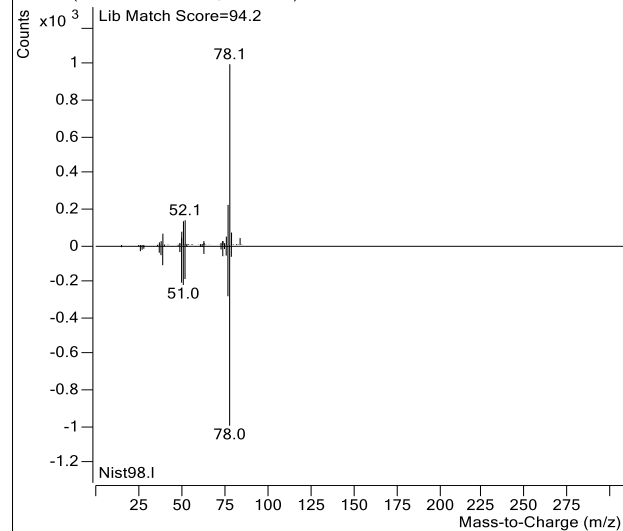


## Benzene

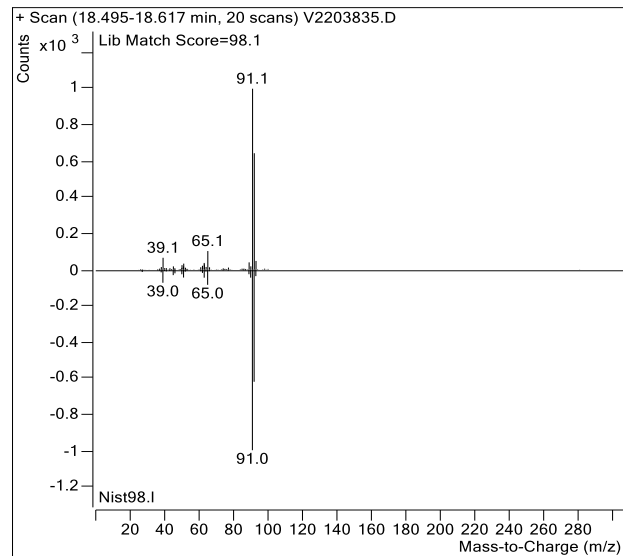
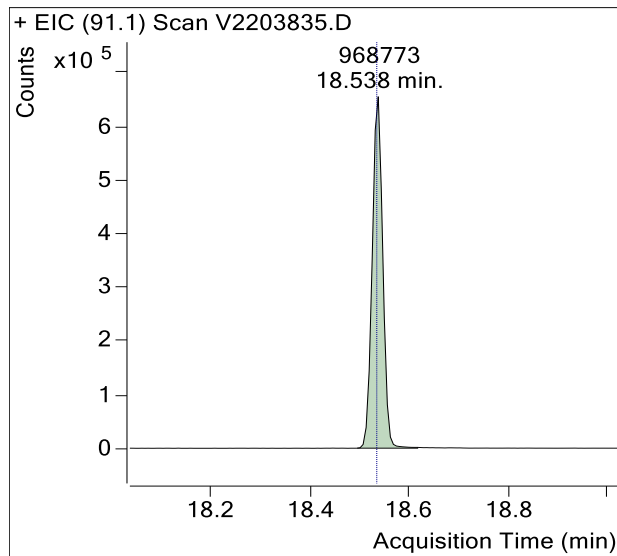
+ EIC (78.1) Scan V2203835.D



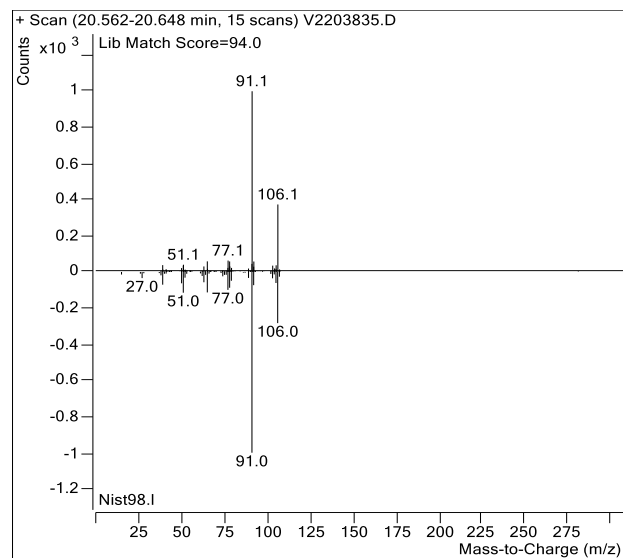
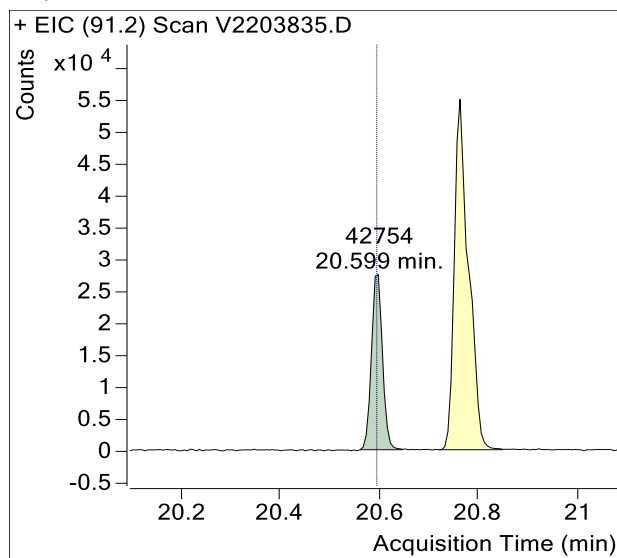
+ Scan (15.883-16.011 min, 21 scans) V2203835.D



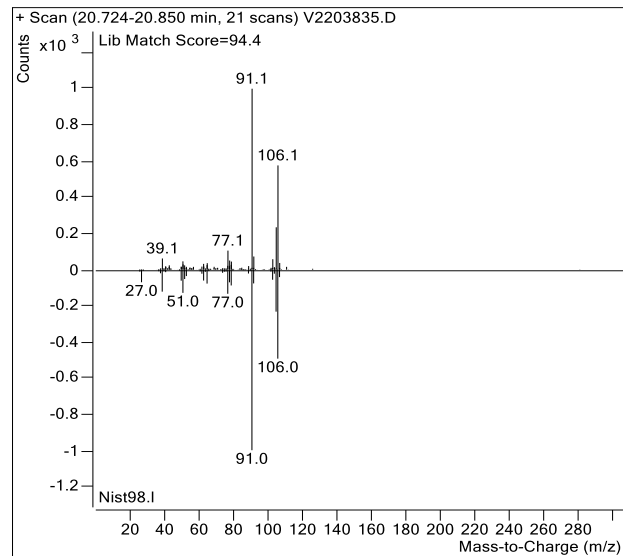
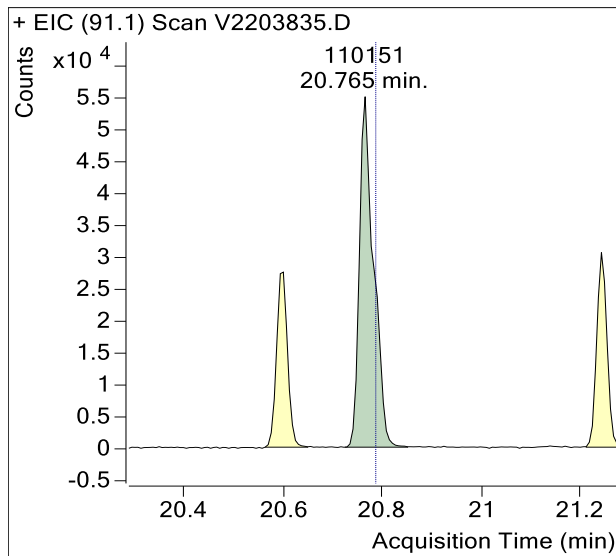
## Toluene



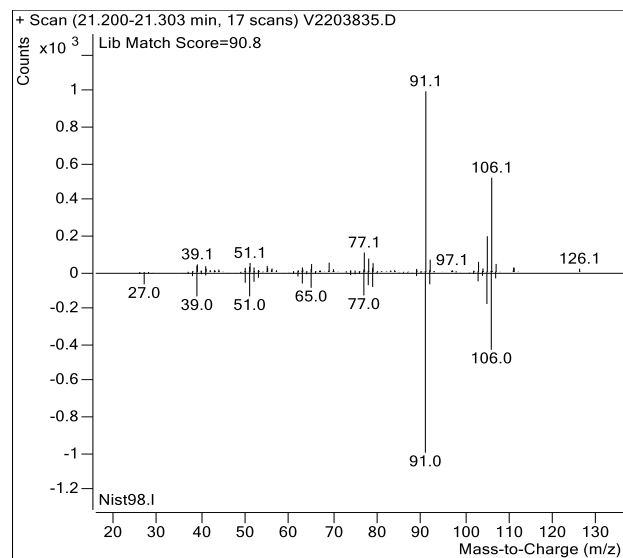
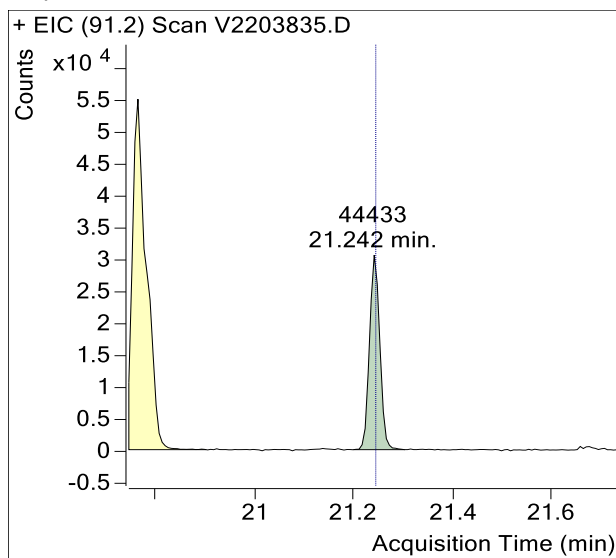
## Ethylbenzene



## m-/p-Xylenes

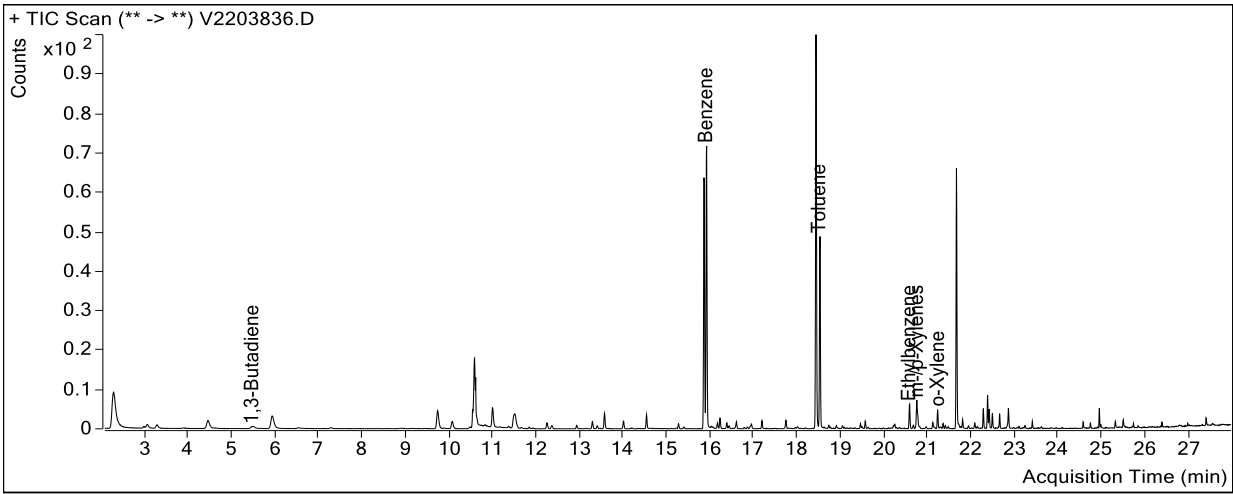


## o-Xylene





Sample Name : USSCL-PT12-S-20221219  
Sample Info : B50632; Recollect  
Data File : V2203836.D  
Acquisition Date : 2023-01-17 20:49:16  
Instrument Method : M325B-TD-CRYO9  
Matrix : AIR

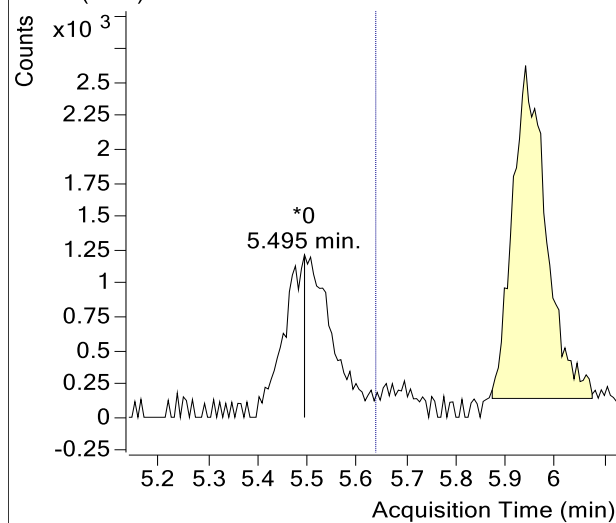


Compound	Retention Time	Response	Flags
1,3-Butadiene	5.64	0	m
Benzene-d6 (IS)	15.86	683,123	
Benzene	15.92	716,213	
Toluene-d8 (IS)	18.45	724,033	
Toluene	18.53	384,974	
Ethylbenzene	20.59	52,085	
m-/p-Xylenes	20.78	63,759	
o-Xylene	21.24	29,126	

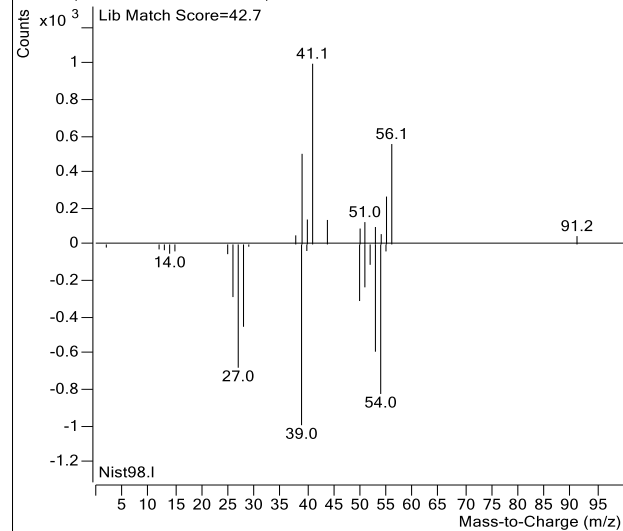
(m)=Manual Integration

## 1,3-Butadiene

+ EIC (39.0) Scan V2203836.D

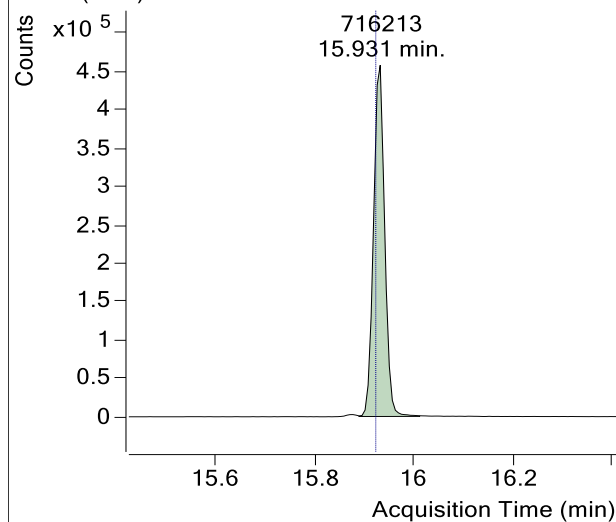


+ Scan (5.495-5.495 min, 1 scans) V2203836.D

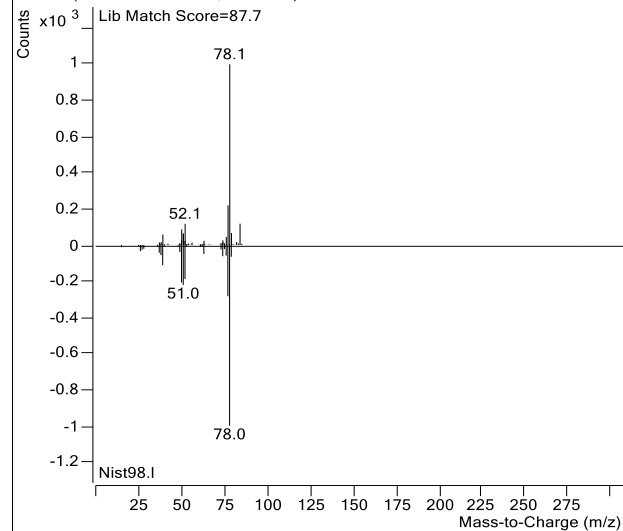


## Benzene

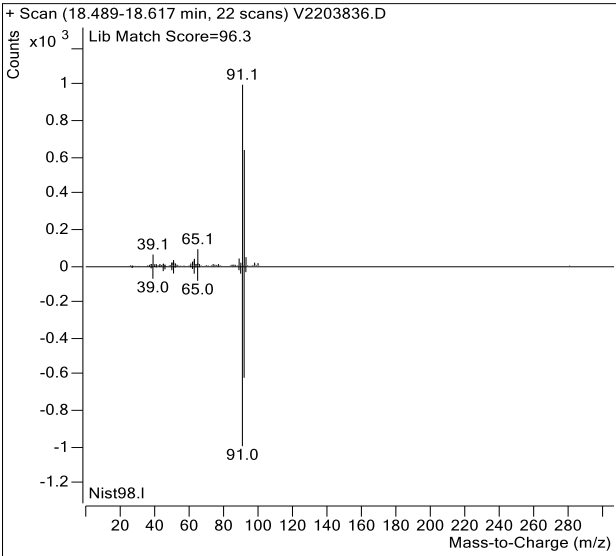
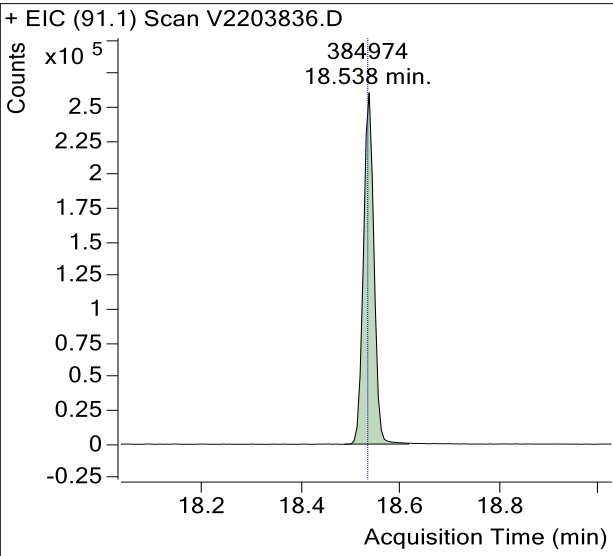
+ EIC (78.1) Scan V2203836.D



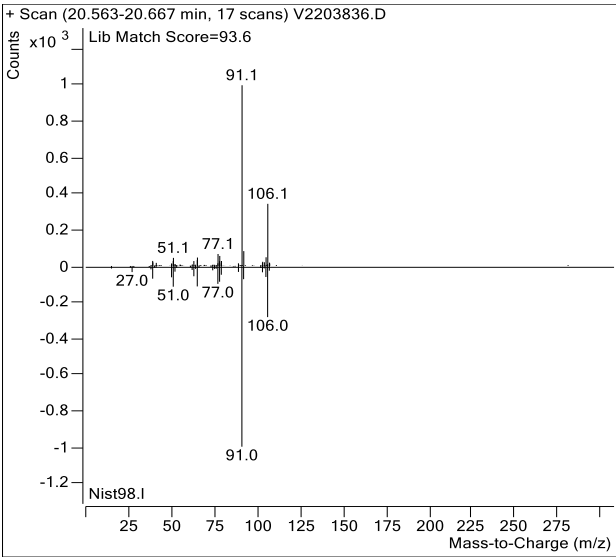
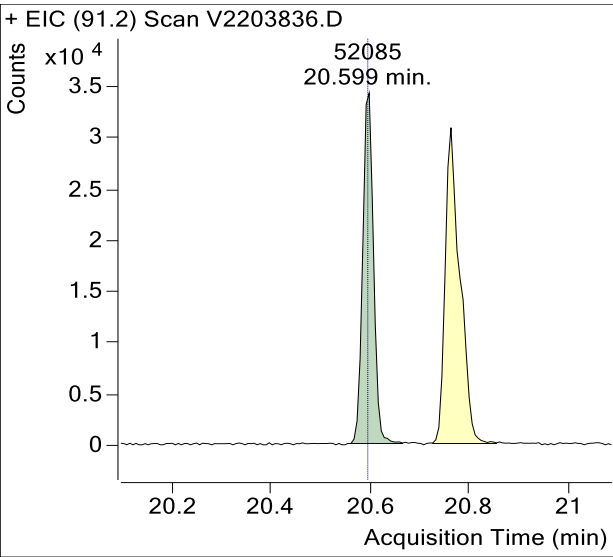
+ Scan (15.889-16.011 min, 21 scans) V2203836.D



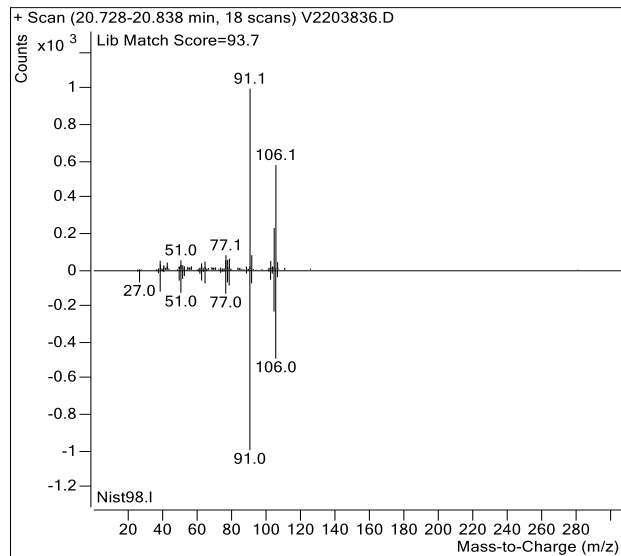
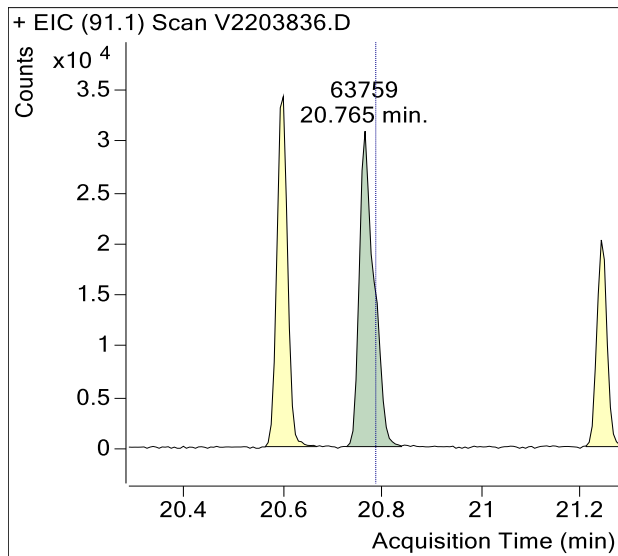
Toluene



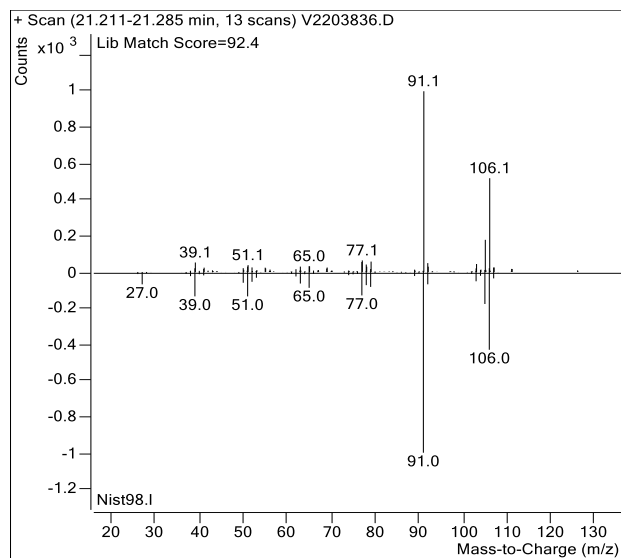
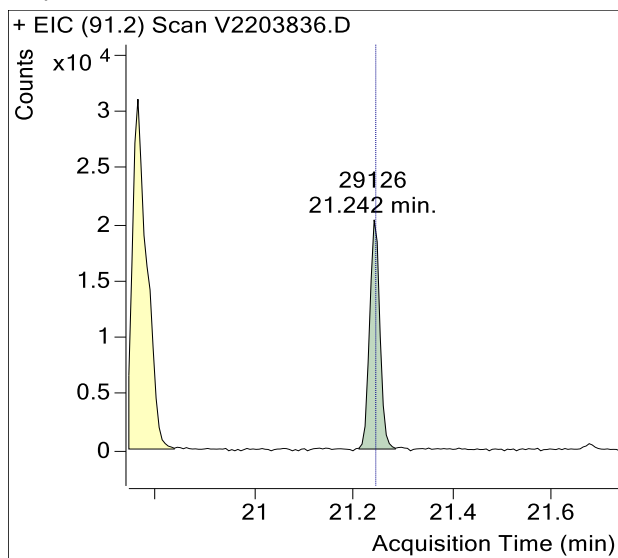
Ethylbenzene



## m-/p-Xylenes



## o-Xylene



# Calibration Summary Reports



## Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

### 1,3-Butadiene Calibration and Blanks

Sample Code	Type	RRF	ICAL RRF	Last CCV RRF	RRF Change	ISTD Change vs ICal	ISTD Change vs Concal	Pass/ Fail	Flags
M325B CCV 5	Cal	0.205	0.187	0.205	9.8%	-11%		Pass	
2023EE101 Method Blank-1	Blank		0.187	0.205			21%	Pass	ND
M325B CCV 5	Check	0.169	0.187	0.205	-9.2%		24%	Pass	
M325B CCV 5	Cal	0.172	0.187	0.172	-8.0%	5.6%		Pass	
M325B CCV 5	Check	0.196	0.187	0.172	4.9%		-1.7%	Pass	

### Benzene Calibration and Blanks

Sample Code	Type	RRF	ICAL RRF	Last CCV RRF	RRF Change	ISTD Change vs ICal	ISTD Change vs Concal	Pass/ Fail	Flags
M325B CCV 5	Cal	1.026	1.054	1.026	-2.7%	-11%		Pass	
2023EE101 Method Blank-1	Blank		1.054	1.026			21%	Pass	ND
M325B CCV 5	Check	1.017	1.054	1.026	-3.6%		24%	Pass	
M325B CCV 5	Cal	1.045	1.054	1.045	-0.94%	5.6%		Pass	
M325B CCV 5	Check	1.028	1.054	1.045	-2.5%		-1.7%	Pass	

### Ethylbenzene Calibration and Blanks

Sample Code	Type	RRF	ICAL RRF	Last CCV RRF	RRF Change	ISTD Change vs ICal	ISTD Change vs Concal	Pass/ Fail	Flags
M325B CCV 5	Cal	1.429	1.731	1.429	-17%	6.1%		Pass	
2023EE101 Method Blank-1	Blank		1.731	1.429			2.3%	Pass	ND
M325B CCV 5	Check	1.401	1.731	1.429	-19%		4.6%	Pass	
M325B CCV 5	Cal	1.425	1.731	1.425	-18%	2.7%		Pass	
M325B CCV 5	Check	1.392	1.731	1.425	-20%		-2.7%	Pass	

### m-/p-Xylenes Calibration and Blanks

Sample Code	Type	RRF	ICAL RRF	Last CCV RRF	RRF Change	ISTD Change vs ICal	ISTD Change vs Concal	Pass/ Fail	Flags
M325B CCV 5	Cal	1.077	1.310	1.077	-18%	6.1%		Pass	
2023EE101 Method Blank-1	Blank		1.310	1.077			2.3%	Pass	ND
M325B CCV 5	Check	1.045	1.310	1.077	-20%		4.6%	Pass	
M325B CCV 5	Cal	1.071	1.310	1.071	-18%	2.7%		Pass	
M325B CCV 5	Check	1.042	1.310	1.071	-20%		-2.7%	Pass	

## Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

### o-Xylene Calibration and Blanks

Sample Code	Type	RRF	ICAL RRF	Last CCV RRF	RRF Change	ISTD Change vs ICal	ISTD Change vs Concal	Pass/ Fail	Flags
M325B CCV 5	Cal	1.115	1.476	1.115	-24%	6.1%		Pass	
2023EE101 Method Blank-1	Blank		1.476	1.115			2.3%	Pass	ND
M325B CCV 5	Check	1.076	1.476	1.115	-27%		4.6%	Pass	
M325B CCV 5	Cal	1.090	1.476	1.090	-26%	2.7%		Pass	
M325B CCV 5	Check	1.058	1.476	1.090	-28%		-2.7%	Pass	

### Toluene Calibration and Blanks

Sample Code	Type	RRF	ICAL RRF	Last CCV RRF	RRF Change	ISTD Change vs ICal	ISTD Change vs Concal	Pass/ Fail	Flags
M325B CCV 5	Cal	1.229	1.341	1.229	-8.4%	6.1%		Pass	
2023EE101 Method Blank-1	Blank		1.341	1.229			2.3%	Pass	ND
M325B CCV 5	Check	1.195	1.341	1.229	-11%		4.6%	Pass	
M325B CCV 5	Cal	1.230	1.341	1.230	-8.3%	2.7%		Pass	
M325B CCV 5	Check	1.222	1.341	1.230	-8.8%		-2.7%	Pass	

# Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

## Calibration Curves

Method	Compound	Level	Cal File	Amount (ng)	Area	ISTD Amt (ng)	ISTD Area	RRF	Dev
V010423A_BUT_BTEX.quantmethod.xml	1,3-Butadiene	1	V2203582.D	5.33	7764	92.4	731618	0.183	-1.8%
V010423A_BUT_BTEX.quantmethod.xml	1,3-Butadiene	2	V2203583.D	10.66	15585	92.4	719073	0.187	0.24%
V010423A_BUT_BTEX.quantmethod.xml	1,3-Butadiene	3	V2203584.D	21.31	30705	92.4	709285	0.187	0.11%
V010423A_BUT_BTEX.quantmethod.xml	1,3-Butadiene	4	V2203585.D	42.62	53143	92.4	718633	0.160	-14%
V010423A_BUT_BTEX.quantmethod.xml	1,3-Butadiene	5	V2203586.D	106.56	149214	92.4	718750	0.179	-4.0%
V010423A_BUT_BTEX.quantmethod.xml	1,3-Butadiene	6	V2203587.D	213.12	343542	92.4	712897	0.208	11%
V010423A_BUT_BTEX.quantmethod.xml	1,3-Butadiene	7	V2203588.D	639.36	1002403	92.4	711892	0.202	8.5%
						Avg:	717450	0.187	
						%RSD:	1.0%	8.5%	
V010423A_BUT_BTEX.quantmethod.xml	Benzene	1	V2203582.D	5.34	47399	92.4	731618	1.116	5.9%
V010423A_BUT_BTEX.quantmethod.xml	Benzene	2	V2203583.D	10.67	86487	92.4	719073	1.036	-1.7%
V010423A_BUT_BTEX.quantmethod.xml	Benzene	3	V2203584.D	21.35	168828	92.4	709285	1.025	-2.8%
V010423A_BUT_BTEX.quantmethod.xml	Benzene	4	V2203585.D	42.69	331745	92.4	718633	0.994	-5.7%
V010423A_BUT_BTEX.quantmethod.xml	Benzene	5	V2203586.D	106.73	838826	92.4	718750	1.005	-4.7%
V010423A_BUT_BTEX.quantmethod.xml	Benzene	6	V2203587.D	213.47	1831707	92.4	712897	1.107	5.0%
V010423A_BUT_BTEX.quantmethod.xml	Benzene	7	V2203588.D	640.40	5442105	92.4	711892	1.098	4.1%
						Avg:	717450	1.054	
						%RSD:	1.0%	4.8%	



# Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

## Calibration Curves

Method	Compound	Level	Cal File	Amount (ng)	Area	ISTD Amt (ng)	ISTD Area	RRF	Dev
V010423A_BUT_BTEX.quantmethod.xml	Ethylbenzene	1	V2203582.D	5.49	67871	109.3	794465	1.664	-3.9%
V010423A_BUT_BTEX.quantmethod.xml	Ethylbenzene	2	V2203583.D	10.97	162425	109.3	789377	2.004	16%
V010423A_BUT_BTEX.quantmethod.xml	Ethylbenzene	3	V2203584.D	21.94	316603	109.3	785741	1.962	13%
V010423A_BUT_BTEX.quantmethod.xml	Ethylbenzene	4	V2203585.D	43.89	626456	109.3	787694	1.937	12%
V010423A_BUT_BTEX.quantmethod.xml	Ethylbenzene	5	V2203586.D	109.71	1150358	109.3	795718	1.408	-19%
V010423A_BUT_BTEX.quantmethod.xml	Ethylbenzene	6	V2203587.D	219.43	2366859	109.3	779253	1.479	-15%
V010423A_BUT_BTEX.quantmethod.xml	Ethylbenzene	7	V2203588.D	658.29	7979722	109.3	778959	1.663	-3.9%
						Avg:	787315	1.731	
						%RSD:	0.84%	14%	
V010423A_BUT_BTEX.quantmethod.xml	m-/p-Xylenes	1	V2203582.D	5.52	53479	109.3	794465	1.303	-0.50%
V010423A_BUT_BTEX.quantmethod.xml	m-/p-Xylenes	2	V2203583.D	11.04	123690	109.3	789377	1.517	16%
V010423A_BUT_BTEX.quantmethod.xml	m-/p-Xylenes	3	V2203584.D	22.08	243950	109.3	785741	1.503	15%
V010423A_BUT_BTEX.quantmethod.xml	m-/p-Xylenes	4	V2203585.D	44.16	488742	109.3	787694	1.501	15%
V010423A_BUT_BTEX.quantmethod.xml	m-/p-Xylenes	5	V2203586.D	110.41	887701	109.3	795718	1.080	-18%
V010423A_BUT_BTEX.quantmethod.xml	m-/p-Xylenes	6	V2203587.D	220.81	1808104	109.3	779253	1.123	-14%
V010423A_BUT_BTEX.quantmethod.xml	m-/p-Xylenes	7	V2203588.D	662.44	5509118	109.3	778959	1.141	-13%
						Avg:	787315	1.310	
						%RSD:	0.84%	15%	

# Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

## Calibration Curves

Method	Compound	Level	Cal File	Amount (ng)	Area	ISTD Amt (ng)	ISTD Area	RRF	Dev
V010423A_BUT_BTEX.quantmethod.xml	o-Xylene	1	V2203582.D	5.55	58616	109.3	794465	1.420	-3.8%
V010423A_BUT_BTEX.quantmethod.xml	o-Xylene	2	V2203583.D	11.10	145370	109.3	789377	1.772	20%
V010423A_BUT_BTEX.quantmethod.xml	o-Xylene	3	V2203584.D	22.21	280767	109.3	785741	1.719	16%
V010423A_BUT_BTEX.quantmethod.xml	o-Xylene	4	V2203585.D	44.42	565063	109.3	787694	1.726	17%
V010423A_BUT_BTEX.quantmethod.xml	o-Xylene	5	V2203586.D	111.04	940928	109.3	795718	1.138	-23%
V010423A_BUT_BTEX.quantmethod.xml	o-Xylene	6	V2203587.D	222.09	1874162	109.3	779253	1.157	-22%
V010423A_BUT_BTEX.quantmethod.xml	o-Xylene	7	V2203588.D	666.27	6804008	109.3	778959	1.401	-5.1%
						Avg:	787315	1.476	
						%RSD:	0.84%	18%	
V010423A_BUT_BTEX.quantmethod.xml	Toluene	1	V2203582.D	5.54	63301	109.3	794465	1.536	15%
V010423A_BUT_BTEX.quantmethod.xml	Toluene	2	V2203583.D	11.08	113600	109.3	789377	1.387	3.5%
V010423A_BUT_BTEX.quantmethod.xml	Toluene	3	V2203584.D	22.17	217038	109.3	785741	1.332	-0.70%
V010423A_BUT_BTEX.quantmethod.xml	Toluene	4	V2203585.D	44.34	429512	109.3	787694	1.314	-2.0%
V010423A_BUT_BTEX.quantmethod.xml	Toluene	5	V2203586.D	110.84	961554	109.3	795718	1.165	-13%
V010423A_BUT_BTEX.quantmethod.xml	Toluene	6	V2203587.D	221.68	2032113	109.3	779253	1.257	-6.3%
V010423A_BUT_BTEX.quantmethod.xml	Toluene	7	V2203588.D	665.05	6760423	109.3	778959	1.395	4.0%
						Avg:	787315	1.341	
						%RSD:	0.84%	8.7%	

# Enthalpy Analytical

Company: All4, Inc.

Job No.: 2023EE101-1 EPA Method 325B Analysis

Client No.: 00701-0002.00 Site: US Steel Corp - Clairton Works ICR

## Calibration Curves

Method	Compound	Level	Cal File	Amount (ng)	Area	ISTD Amt (ng)	ISTD Area	RRF	Dev
V010423A_BUT_BTEX.quantmethod.xml	1,3-Butadiene	ICV	V2203611.D	106.10	158480	92.4	727760	0.189	1.2%
V010423A_BUT_BTEX.quantmethod.xml	Benzene	ICV	V2203611.D	100.79	815037	92.4	727760	1.022	-3.1%
V010423A_BUT_BTEX.quantmethod.xml	Ethylbenzene	ICV	V2203611.D	97.47	998208	109.3	788911	1.387	-20%
V010423A_BUT_BTEX.quantmethod.xml	m-/p-Xylenes	ICV	V2203611.D	97.63	766279	109.3	788911	1.063	-19%
V010423A_BUT_BTEX.quantmethod.xml	o-Xylene	ICV	V2203611.D	98.53	803597	109.3	788911	1.105	-25%
V010423A_BUT_BTEX.quantmethod.xml	Toluene	ICV	V2203611.D	100.66	882829	109.3	788911	1.188	-11%

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